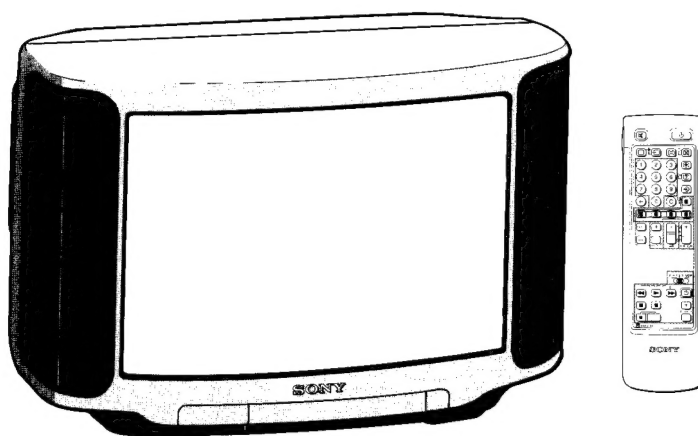


SERVICE MANUAL

BE-3B CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.	MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-C2581A	RM-833	Italian	SCC-G81C-A	KV-C2581D	RM-833	AEP	SCC-G77D-A
KV-C2580B	RM-833	French	SCC-G85C-A	KV-C2583E	RM-833	Spanish	SCC-G82C-A



TRINITRON® COLOR TV
SONY®

ITEM MODEL	Television System	Stereo System	Channel Coverage	Color System
AEP	B/G/H, D/K	GERMAN Stereo	PAL B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H2 (C) UHF:21-69 D/K VHF:R01-R12 UHF:R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
Italian	B/G/H	GERMAN Stereo	ITALIA VHF:A-H2 (C) UHF: 21-69 PAL B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10	PAL NTSC4.43, NTSC3.58 (VIDEO IN)
French	B/G/H, L, I	NICAM Stereo	L VHF:F02-F10 UHF:F21-F60 CABLE:B-Q B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H2 (C) UHF:21-69 I UHF:B21-B69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
Spanish	B/G/H,	NICAM Stereo	PAL B/G VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H2 (C) UHF:21-69	PAL NTSC4.43, NTSC3.58 (VIDEO IN)

MODEL	AEP	Italian	French	Spanish
Power Consumption	108W	108W	108W	108W

SPECIFICATIONS

Picture Tube Hi-Black Trinitron
Approx. 63 cm (25 inches)
(Approx. 59 cm picture measured diagonally)
110° -deflection

Input/Output Terminals

[REAR]

- Ⓐ 1 21-pin Euro connector (CENELEC standard)
 - inputs for audio and video signals
 - inputs for RGB
 - outputs of TV video and audio signals
- Ⓒ 2/Ⓔ 2 21-pin Euro connector
 - inputs for audio and video signals
 - inputs for S video
 - outputs for audio and video signals (selectable)

[FRONT]

- Ⓔ 3 Video input - phono jack
- Ⓒ 3 Audio inputs - phono jacks
- Ⓔ 3S video input 4-pin DIN
- Ω Headphone jacks : stereo minijack

- Sound output 2 x 15W (Music power)
- Power requirements 220 - 240V
- Dimensions (WxHxD) Approx. 720x497x480 mm
- Weight Approx. 35.5kg
- Supplied accessories RM-833 Remote Commander (1)
IEC designation R6 battery (1)
- Other features NICAM , FASTEXT, TOPTXT.

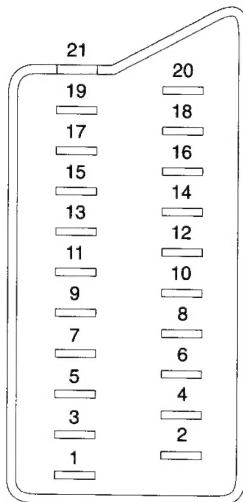
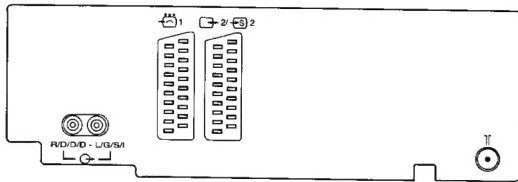
[RM-833]

- Remote control system infrared control
- Power requirements 1.5V dc
1 battery IEC designation
R6 (size AA)
- Dimensions Approx. 65x225x21 mm (w/h/d)
- Weight Approx. 157g (Not including batteries)

Design and specifications are subject to change without notice.

Model name Item	KV-C2581A	KV-C2580B	KV-C2581D	KV-C2583E
RGB Priority	ON	ON	OFF	OFF
Woofer Box	OFF	OFF	OFF	OFF
Scart 1	ON	ON	ON	ON
Scart 2	ON	ON	ON	ON
Front in (3)	ON	ON	ON	ON
AKB in 16:9 mode	ON	ON	ON	ON
Norm B/G	ON	ON	ON	ON
Norm I	OFF	OFF	OFF	ON
Norm D/K	OFF	OFF	ON	OFF
Norm AUS	OFF	OFF	OFF	OFF
Norm L	OFF	ON	OFF	OFF
Teletext	ON	OFF	ON	ON
Nicam Stereo	OFF	ON	OFF	ON
Language Preset	Italian	French	Deutsch	Spanish

21 pin connector (②-1 ③-2 ④-4)



Pin No.	1	2	4	Signal	Signal level
1	○	○	○	Audio output B (right)	Standard level : 0.5V rms Output impedance : Less than 1kohm*
2	○	○	○	Audio input B (right)	Standard level : 0.5V rms Output impedance : More than 10kohm*
3	○	○	○	Audio output A (left)	Standard level : 0.5V rms Output impedance : Less than 1kohm*
4	○	○	○	Ground (audio)	
5	○	○	○	Ground (blue)	
6	○	○	○	Audio input A (left)	Standard level : 0.5V rms Output impedance : More than 10kohm*
7	○	●	●	Blue input	0.7 ± 3dB, 75 ohms, positive
8	○	○	○	Function select (AV control)	High state (9.5 - 12V) : Part mode Low state (0 - 2V) : TV mode Input impedance : More than 10k ohms Input capacitance : Less than 2nF
9	○	○	○	Ground (green)	
10	○	○	○	Open	
11	○	●	●	Green	Green signal : 0.7 ± 3dB, 75 ohms, positive
12	○	○	○	Open	
13	○	○	○	Ground (red)	
14	○	○	○	Ground (blanking)	
15	○	—	—	Red input (S signal) chroma input	0.7 ± 3dB, 75 ohms, positive 0.3 ± 3dB, 75 ohms, positive
16	○	●	●	Blanking input (Ys signal)	High state (1 - 3V) Low state (0 - 0.4V) Input impedance : 75ohms
17	○	○	○	Ground (video output)	
18	○	○	○	Ground (video input)	
19	○	○	○	Video output	1V ± 3dB, 75ohms, positive sync: 0.3V(-3/+10dB)
20	○	—	—	Video input	1V ± 3dB, 75ohms, positive sync: 0.3V(-3/+10dB)
20	—	○	○	Video input Y (S signal)	1V ± 3dB, 75ohms, positive sync: 0.3V(-3/+10dB)
21	○	○	○	Common ground (plug, shield)	

○ Connected ● Not Connected (open) * at 20Hz - 20kHz

Pin No	Signal	Signal level
1	Ground	
2	Ground	
3	Y (S signal) input	1V ± 3dB 75 ohm , positive Sync. 0.3V -3/+10 dB
4	C (S signal) input	0.3V ± 3dB 75 ohm , positive Sync.

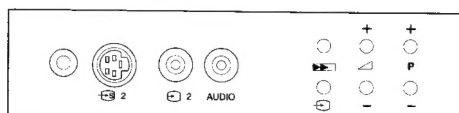


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CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVAL OF THE ANODE CAP.

WARNING !!

AN ISOLATING TRANSFORMER SHOULD BE USED DURING ANY SERVICE WORK TO AVOID POSSIBLE SHOCK HAZARD, DUE TO A LIVE CHASSIS. THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARKED  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLIMENTS PUBLISHED BY SONY.


ATTENTION

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION !!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÂSSIS SOUS TENTION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÂSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

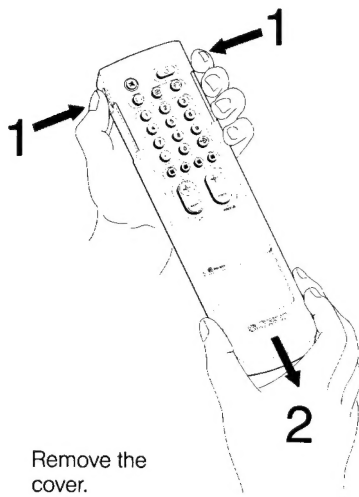
ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ !!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET PAR UNE MARQUE  SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIÈCES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT, NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÈCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY.

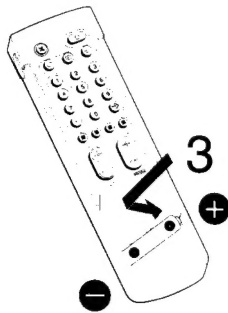
SECTION 1 GENERAL

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

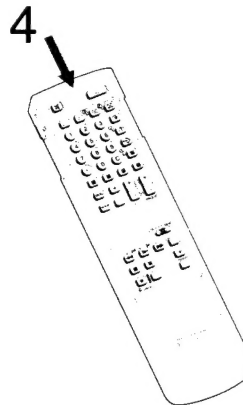
Getting Started



Remove the cover.



Check the correct polarity.



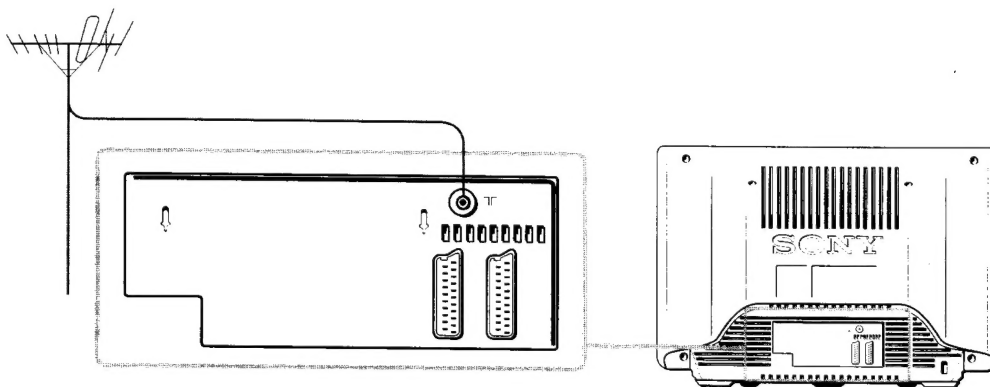
Refit the outside cover making sure that the Full Function side is visible.

About Battery Life

Under normal operation, a battery will last up to half a year.

Connecting the Aerial

Connect the aerial to the Π socket at the rear of the TV.
(cable not supplied)



Choosing a Language

(See inside of front cover and back cover)

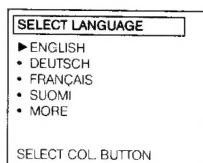
1 Depress ① **A** on the TV.

The TV turns on. If the standby indicator **B** on the TV is lit, press **□** ③ or any number button ④ on the Remote Commander.

2 Press **MENU** ⑦ on the Remote Commander.

The SELECT LANGUAGE screen appears.

3 Press one of the colour buttons ⑩ on the Remote Commander to select a language (Press the white button ⑩ to display other language alternatives). The SELECT LANGUAGE screen clears and all subsequent menus appear in the chosen language.



Note: From the second time when you turn on the TV, the MENU screen appears instead of the SELECT LANGUAGE screen. Press the yellow button ⑦ then press the white button ⑩ to redisplay the SELECT LANGUAGE screen.

Tuning in to Channels

You can tune in up to 60 channels to programme positions either automatically or manually.

auto tuning:

A single button press allows all receivable channels to be tuned. Use if you are unfamiliar with the channel numbers of stations.

manual tuning:

Use if you are familiar with the channel numbers of stations.

Choose the more appropriate way for you.

Tuning in to Channels Automatically

There are two possibilities for auto tuning;

A. On the TV: hold down **▶▶** ⑤ on the front of the TV for 2 seconds

Note: The button **▶▶** for Automatic Presetting of channels is protected to prevent accidental usage. Use a pencil to press it.

or

B. On the Remote Commander: as follows

1 Press **MENU** ⑦.

2 Press the white button ⑩.

3 Hold down the red button ⑪ for 2 seconds,

Note: Press the green button ⑩ to cancel.

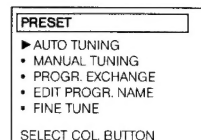
Tuning in to Channels Manually

1 Press **MENU** ⑦.

The MENU screen appears. **MENU**

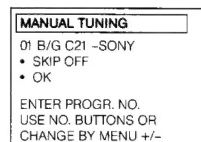
2 Press the white button ⑩ to select **PRESET**.

The PRESET screen appears.



3 Press the green button ⑩ to select **MANUAL TUNING**

The MANUAL TUNING screen appears.



4 Press the number buttons ④ or MENU +/- ⑨ to select a programme position.

If you use the number buttons ④, enter a double-digit number. (e.g. for programme number 4, first press 0, then 4)

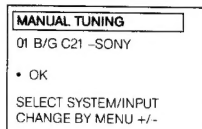
5 Press the green button ⑦.

Note: Use MENU +/- ⑨ to select TV system.

You can alternatively select input sources which may be assigned to programme positions.

The display changes as follows:

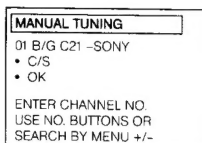
B/G → D/K → AV1 → RGB → AV2 → YC2 → AV3 → YC3



6 Press the green button ⑦.

Note: If a video input source is selected in step 5, this is now stored.

Refer to step 4 to tune other programme positions.



7 If you have selected B/G in step 5, press the red button ⑪ to select C (regular channel) or S (cable channel).

8 Press the number buttons ④ or MENU +/- ⑨ to select the channel number.

If you use the number buttons ④, enter a double-digit number. (e.g. for channel 23, first press 2, then 3)

9 Press the green button ⑦ to store.

Note: If you want to preset other channels, repeat steps 4 to 9.

10 Press MENU ⑦ twice to return to the normal screen.

Note: You can skip unused programme positions when selecting programmes with the PROGR +/- buttons ⑩.

Press the red button ⑪ to skip in step 4. However, the skipped programmes may still be called up when you use the number buttons.

Basic TV Operations

Turning the TV on and off

Turning on

Depress ① A on the TV.

Turning off temporarily

Press ① B on the Remote Commander.

The TV enters standby mode and the standby indicator B on the front of the TV lights up.

Turning on again

Press ③, PROGR +/- ⑩, or one of the number buttons ④ on the Remote Commander.

Turning off completely

Depress ① A on the TV.

Note: It is recommended to use ① A to turn off the TV. This could help you save energy.

Selecting TV Programmes

Press PROGR +/- ⑩ or press the number buttons ④.

To select a double-digit number

Press -/- ⑤, then the number buttons ④.

Adjusting the Volume

Press ① +/- ⑩.

Muting the Sound

Press ① M.

To resume normal sound, press ① M again.

Displaying the On-screen Indications

Press ① I once to display the on-screen indications.

Press again to make the indications disappear.

Operating the TV Using the Buttons on the TV

With the buttons on the TV, you can adjust or select the functions as follows:

Press ① +/- ⑩ to adjust the volume.

Press P +/- ② to select programme numbers or to turn the TV on from the standby mode.







Press ① F to select the input source.

Press ① E to preset channels automatically.

Advanced TV Operations

Operating the Menu System








You can adjust picture and sound, preset channels to programme positions and utilise other convenient features by using the following menu system.

Press:	to:
1 MENU 	enter the MENU screen
2 a colour button 	select an item you want to change (The selected item is marked by a triangle.)
3 MENU +/- 	change (or adjust) the contents of the item
4 MENU 	return to the MENU screen
5 MENU  again	return to the normal screen
Press MENU  once or twice whenever you want to return to the normal screen.	

Note: When selecting menus, the picture becomes darker. If, however, an item in the PICTURE ADJUSTMENT menu is selected, normal level of TV picture is restored to allow the best adjustment.





Adjusting the Picture and Sound





Although picture and sound are adjusted at the factory you can adjust them to suit your own taste.

- 1 Press MENU .**
The MENU screen appears. 
- 2 Press the red button  to select PICTURE or the green button  to select SOUND.**
- 3 Press the respective colour button  to select an item.**
- 4 Press MENU +/-  to adjust.**
- 5 Press MENU  twice or wait until the menu displays disappear automatically to return to the normal screen.**

PICTURE ADJUSTMENT

(First Page)

PICTURE ADJUSTMENT	
▶ 	■■■■■■■■■■
• 	■■■■■■■■■■
• 	■■■■■■■■■■
• 	■■■■■■■■■■
• MORE	
SELECT COL. BUTTON ADJUST BY MENU +/-	

Press colour button	Effect
Red: For Picture 	Less —+— More
Green: For Colour 	Less —+— More
Yellow: For Brightness 	Darker —+— Brighter
Blue: For Sharpness 	Softer —+— Sharper
White:	Next page of PICTURE ADJUSTMENT

PICTURE ADJUSTMENT

(Second Page)

PICTURE ADJUSTMENT
<ul style="list-style-type: none"> ► COLOUR TONE NORMAL • NOISE REDUCE ON • FORMAT NORMAL • NTSC • BACK
SELECT COL. BUTTON CHANGE BY MENU +/-

Press colour button	Effect
Red: For Colour Tone	Normal ⇌ Warm (reddish colour tone) ⇌ Cool (blueish colour tone)
Green: For Noise Reduce	ON: Reduces picture noise (in case of low signal level) OFF: Normal setting
Yellow: For Format	Normal: Normal setting 16:9 Wide screen effect
Blue: For Hue control (only for NTSC video signals)	Reddish ——— Greenish
White:	Back to first page of PICTURE ADJUSTMENT

Note: Press →•← 8 on the Remote Commander to reset to the factory preset levels for picture and sound.

SOUND ADJUSTMENT

(First Page)

SOUND ADJUSTMENT
<ul style="list-style-type: none"> ► VOLUME • TREBLE • BASS • BALANCE • MORE
SELECT COL. BUTTON ADJUST BY MENU +/-

Press colour button	Effect
Red: For Volume	Less ——— More
Green: For Treble	Less ——— More
Yellow: For Bass	Less ——— More
Blue: For Balance	More left – more right
White:	Next page of SOUND ADJUSTMENT

SOUND ADJUSTMENT

(Second Page)


SOUND ADJUSTMENT
<ul style="list-style-type: none"> • SPACE SOUND OFF • LOUDNESS OFF • STEREO • BACK
SELECT COL. BUTTON CHANGE BY MENU +/-

Press colour button	Effect
Red: For Space Sound	OFF: normal sound ON: for a special acoustic sound effect
Green: For Loudness	OFF: normal sound ON: when listening to music broadcast
Yellow: For Stereo	Stereo ⇌ Mono A (left channel) ⇌ Mono B (right channel) ⇌ Mono
White:	Back to first page of SOUND ADJUSTMENT

Note: Press →•← 8 on the Remote Commander to reset to the factory preset levels for picture and sound.

Using Special Features

With your TV you can utilise special features such as Parental Lock or Sleep Timer.

- 1 Press MENU ⑦.**
The MENU screen appears. 
- 2 Press the yellow button ⑪ to select FEATURES.**
- 3 Press the respective colour button ⑩ to select an item.**
- 4 Press MENU +/- ⑨ to change.**
- 5 Press MENU ⑦ twice or wait until the menu displays disappear automatically to return to the normal screen.**

FEATURES


FEATURES
<ul style="list-style-type: none"> ▶ SLEEP TIMER OFF • PARENTAL LOCK OFF • TV BUTTON LOCK OFF • DEMO MODE • LANGUAGE
SELECT COL. BUTTON CHANGE BY MENU +/-

Press colour button	Effect
Red: For Sleep Timer (Automatic switch off function)	OFF ⇔ 0:30 ⇔ 1:00 ⇔ 1:30 ⇔ 2:00 (hours) After the selected time the TV set switches itself automatically into standby mode.
Green: For Parental Lock (For preventing children from watching programmes which you consider unsuitable)	OFF: Normal setting ON: The TV-channel you are watching is now blocked. In this way you can prevent undesirable broadcasts from appearing on the screen.
Yellow For TV Button Lock	OFF: Normal setting ON: The buttons on the TV do not function anymore. (The Remote Commander still operates)
Blue: For Demo Mode	ON: A sequence of menu pictures is displayed. Press any button on the Remote Commander to stop the function.
White: For Language	The SELECT LANGUAGE screen appears.

Advanced Presetting Functions

Exchanging Programme Positions

You can exchange the programme positions to a preferred order (example: exchange programme 09 (channel C21) with programme 15 (channel C24).


- 1 Press MENU ⑦.**
The MENU screen appears. 
- 2 Press the white button ⑩.**
The PRESET screen appears.
- 3 Press the yellow button ⑪.**
The PROGR. EXCHANGE SCREEN appears.

PROGR. EXCHANGE
<ul style="list-style-type: none"> 01 B/G C21 - SONY • NEXT CHANNEL • PREVIOUS CHANNEL • STORE
SELECT COL. BUTTON

- 4 Press the white button ⑩ repeatedly until the desired programme number (09) appears.**
- 5 Press the red or the green button ⑩ repeatedly until the desired channel number (C24) appears.**
- 6 Press the white button ⑩ to store.**
Now exchange has been completed. Channel C24 is tuned in to programme 09 and channel C21 is tuned in to programme 15.
- 7 Press MENU ⑦ twice to return to the normal screen.**

Editing Programme Names

You can edit the programme names up to five letters.

- 1 Press MENU ⑦.**
The MENU screen appears. 
- 2 Press the white button ⑩.**
The PRESET screen appears.
- 3 Press the blue button ⑪.**
The EDIT PROGR. NAME screen appears.
The first character flashes.

EDIT PROGR. NAME
<ul style="list-style-type: none"> 01 B/G C21 - SONY • NEXT LETTER • STORE
CHANGE BY MENU +/-

-
- 4 Press MENU +/- ⑨ to edit the first letter.**
The first letter changes as follows
A ↔ B ↔ ... ↔ Z ↔ 1 ↔ ... 9 ↔ "-" (space).



-
- 5 Press the red button ⑪ to move to the next letter.**

-
- 6 Repeat steps 4 to 5, until the fifth letter is chosen.**

-
- 7 Press the green button ⑩.**
The programme name is stored, and the normal screen appears. To edit another programme name, repeat steps 1 to 7.
-

Fine Tuning

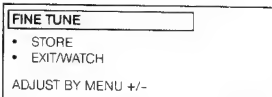
You can adjust the receiving conditions by the FINE TUNE function.

-
- 1 Press MENU ⑦**
The MENU screen appears.



-
- 2 Press the white button ⑮.**
The PRESET screen appears.

-
- 3 Press the white button ⑮ again.**
The FINE TUNE screen appears.



-
- 4 Press MENU +/- ⑨ to adjust the receiving condition.**

-
- 5 Press the red button ⑪ to store the adjustment, or press the green button ⑩ not to store.**
Now the normal screen appears. If you have pressed the green button, the fine tuned condition is cancelled once you choose another programme.

Note: If the FINE TUNE screen disappears automatically before you press the red button ⑪, the fine tuned condition is not stored. Repeat steps 1 to 5.

Tuning in to a Channel Temporarily

You can tune in to a channel temporarily, even when it has not been preset.

-
- 1 Press C ⑬ on the Remote Commander.**
For cable channels press C ⑬ twice. The indication "C" (or "S" for cable channels) appears on the screen.

-
- 2 Enter a double digit channel number using the number buttons (e.g. for channel 23, first press 2, then 3).**
The channel appears.
However, the channel is not stored.
-

Teletext Operation

TV stations broadcast teletext programmes via the TV channels. For basic operation of teletext, use the simple side of the Remote Commander. For the advanced features of teletext, use the buttons indicated in green on the full function side of the Remote Commander.

Basic Teletext Operation

Switching Teletext on and off

1 Select the channel which carries the teletext service you wish to view.

2 Press **[M]** **[1]** to display Teletext.

If no teletext signal is broadcast, the indication P100 is displayed on a black screen.



3 Input three digits for the page number using the number buttons **[0-9]**.

The numbers are displayed on the screen and the requested page appears in a few seconds.

Note: If you make a mistake, type in any three digits, then re-enter the correct page number.

4 Press **[0]** **[3]** to return to the TV mode.

Notes:

- To change the teletext channels. First press **[0]** **[3]** to return to the TV mode, then repeat steps 1 to 3.
- If the signal of a TV channel is weak, teletext errors may occur.

Advanced Teletext Operation

Using Fastext

With Fastext you can access pages with one button press. When a Fastext page is broadcast, a colour-coded menu will appear at the bottom of the screen. The colours of this menu correspond to the red, green, yellow and blue buttons **[6-9]** on the Remote Commander. Press the corresponding colour button **[6-9]** on the Remote Commander which corresponds to the colour-coded menu. The page will be displayed in a few seconds.

Requesting the Index page

Press **[I]** **[1]**. The Index page appears.

Accessing the next or preceding page

Press **[P]** (PAGE -) or **[N]** (PAGE +) **[1]**. The next or the preceding page appears on the screen.

Superimposing the teletext display on the TV picture

Press **[M]** **[1]** once if you are in text mode or press **[M]** **[1]** twice if in TV mode.

To return to the normal teletext display press **[M]** **[1]** again.



Preventing a teletext page from being updated or changed

Press **[H]** (HOLD) **[1]**. The HOLD symbol **[H]** appears on the screen and the selected subpage is held until you press **[M]** **[1]** to cancel.

Enlarging the teletext display

Press **[E]** **[1]** once to enlarge the upper half. Press twice to enlarge the lower half. Press again to restore the normal display.



Revealing concealed information (e.g. answers to a quiz)

Press **[R]** (REVEAL) **[1]**. The information is revealed. Press **[R]** **[1]** again to conceal the information.

Watching TV while waiting for a requested page to be displayed

1 Request a new teletext page.

2 Press **[T]** (TEXT CL) **[1]**.

The TV programme is displayed and the symbol **[T]** is displayed at the top of the page.

Note: When the requested page is available the page number is displayed at the top of the screen.

3 Press **[M]** **[1]** to view the page.

To cancel the request

Display the teletext page, then press **[M]** **[1]**. The request is now cancelled. Press **[0]** **[3]** to resume TV mode.

Using the Favourite Page system

You can store up to four of your favourite teletext pages per programme with the help of the Favourite page system. In this way you have quick access to the pages you watch frequently.

Storing the Favourite Pages

1 Select the page you would like to store using the number buttons **[0-9]**.

2 Press **[F]** **[1]** twice.

The colour prompts at the bottom of the screen flash.

3 Press any of the colour buttons **[6-9]** on the Remote Commander to store the selected page.

The page is now stored on this button.

Repeat steps 1 to 3 for the other 3 pages available.

Displaying the Favourite pages

1 Press **[F]** **[1]**.

2 Press the colour button **[6-9]** corresponding to the colour prompt onto which the desired page is stored.

The page is requested. (It may take a few seconds to be received).

Note: Step 1 must be taken before every favourite page selection otherwise the normal Fastext facility operates.

Using the Time Function in the TV mode

Press **[T]** **[1]** to request the time. Press again to cancel the request.

Note: This function is available only when teletext is broadcast.

Connecting Other Equipment

You can connect optional audio/video equipment to this TV such as VCRs, video disc players, cameras or stereo systems.

Connector	Acceptable input signal	Available output signal
→ 1 M (AV1/RGB)	Audio/video and RGB signal	Audio/video signal from TV Tuner
→ 2/→ 3 L (AV2/YC2)	Audio/video and S-video signal	Audio/video signal from selected source
→ 3/→ 3 G H (AV3)	Audio/video signal	No outputs
→ 3/→ 3 G I (YC3)	Audio/S-video signal	No outputs

To watch a video input picture, press → 2 until the desired video input appears.

To return to the normal TV picture, press → 2 repeatedly or press □ 3.

If you have a decoder, connect it to → 1 **M**

Connecting a VCR Using the TV Aerial Terminal

Connect the aerial output of the VCR to the aerial terminal **K** of the TV. It is recommended to tune in the VCR signal to programme number "0". For details, see "Tuning in to Channels Manually" on page 20.

S video input (Y/C input) **L**.

Video signals may be separated into Y (luminance or brightness) and C (chrominance) signals.

Separating the Y and C signals prevents them from interfering with each other and therefore improves the picture quality (especially luminance). This TV is equipped with 2 video input terminals through which these signals can be input directly.

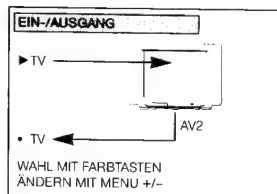
Checking and Selecting the Input and Output Sources Using the Menu

You can display a menu screen to see which input and output source are selected. You can also change the selecting using this menu.

Checking the Input and Output Sources

1 Press MENU **7**.
The MENU screen appears.

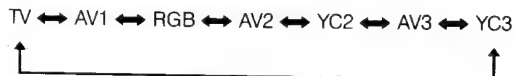
2 Press the blue button **1** to select INPUT/OUTPUT.
The INPUT/OUTPUT screen appears.



Selecting an Input Signal

Press the red button **1** to select INPUT. Press MENU +/- **9** to select the desired input source.

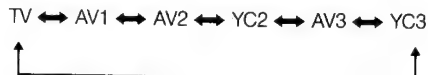
You can select among the following sources:



Selecting an Output Signal

The → 2/→ 3 **L** connector **L** outputs the source input from the other connectors. Press the green button **1** to select OUTPUT. Press MENU +/- **9** to select the desired output source.

You can select among the following sources:



Note: Press **7** twice or wait until the menu display disappears automatically to return to the normal screen.

Remote Control of Other Sony Equipment

You can use the TV Remote Commander to control most Sony remote-controlled video equipment such as: Beta, 8 mm or VHS VCRs or video disc players.

Tuning the Remote Commander to the equipment

1 Set the VTR 1/2/3 MDP selector **20** according to the equipment you want to control:

- VTR 1: Beta or VCR
- VTR 2: 8mm VCR
- VTR 3: VHS VCR
- MDP: Video Disc Player

2 Use the buttons **21** to operate the additional equipment.

Notes:

- If your video equipment is furnished with a COMMAND MODE selector: set this selector to the same position as the VTR 1/2/3 MCP selector on the TV Remote Commander.
- If the equipment does not have a certain function, the corresponding button on the Remote Commander will not operate
- When you use the ● (record) button, make sure to press this button and the one to the right of it simultaneously.

Using Headphones

You can utilise headphones. Connect them to the headphone jack **1**, then the sound from the speakers goes off.

Note: You can't control the sound adjustment except for volume.

For your Information

Troubleshooting

Here are some simple solutions to problems which may affect the picture and sound.

No picture (screen is dark), no sound

- Plug the TV in.
- Press ① **A** on the TV. (If the standby indicator **B** is lit, press ③ or any number button ④ on the Remote Commander.)
- Check if the selected video source is on.
- Turn the TV off for three or four seconds and then turn it on again using ① **A**.

Poor or no picture (screen is dark), but good sound

- Press MENU ⑦ to enter the MENU screen, and press the red button ⑮, then adjust ① and ②.

Good picture but no sound

- Press ① + ⑮.
- If ① is displayed on the screen, press ①.

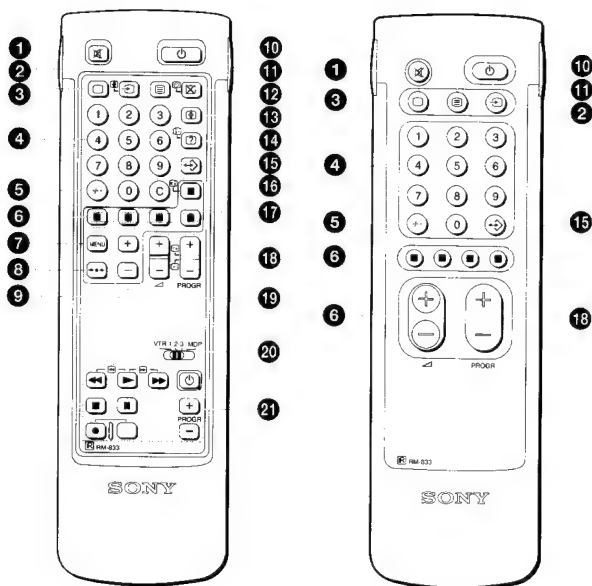
No colour for colour programmes

- Press MENU ⑦ to enter the MENU screen, and press the red button ⑮, then adjust ③.

Remote Commander does not function

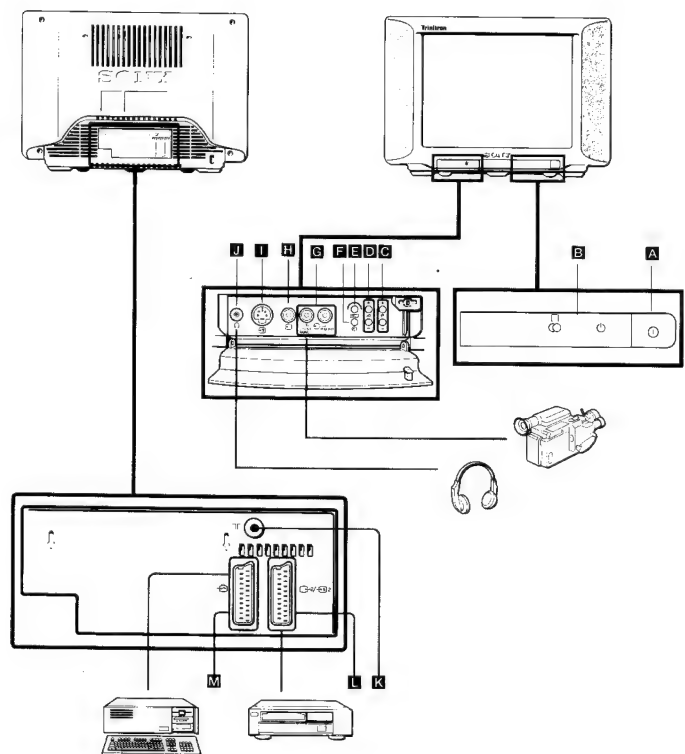
- Replace the battery.

If you continue to have problems, have your TV serviced by qualified personnel. Never open the casing yourself.



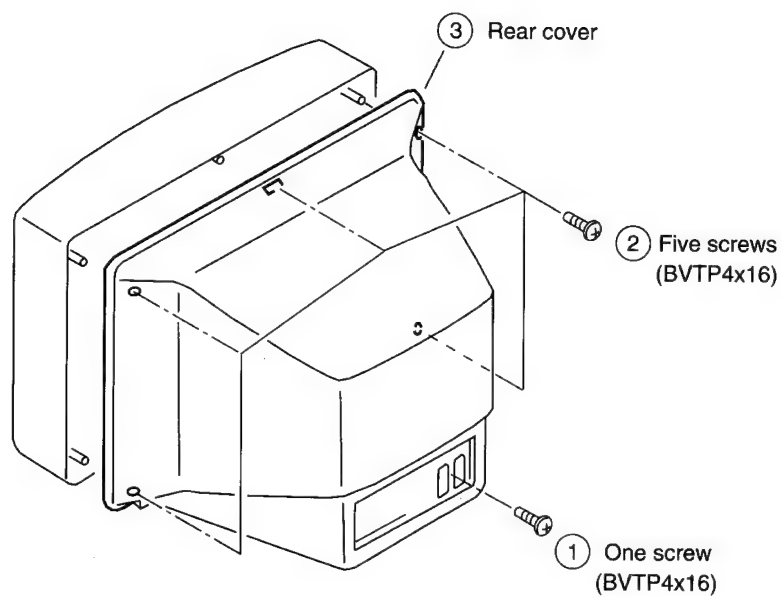
Voliständige Seite
Full-Function Side

Vereinfachte Seite
Simple Side

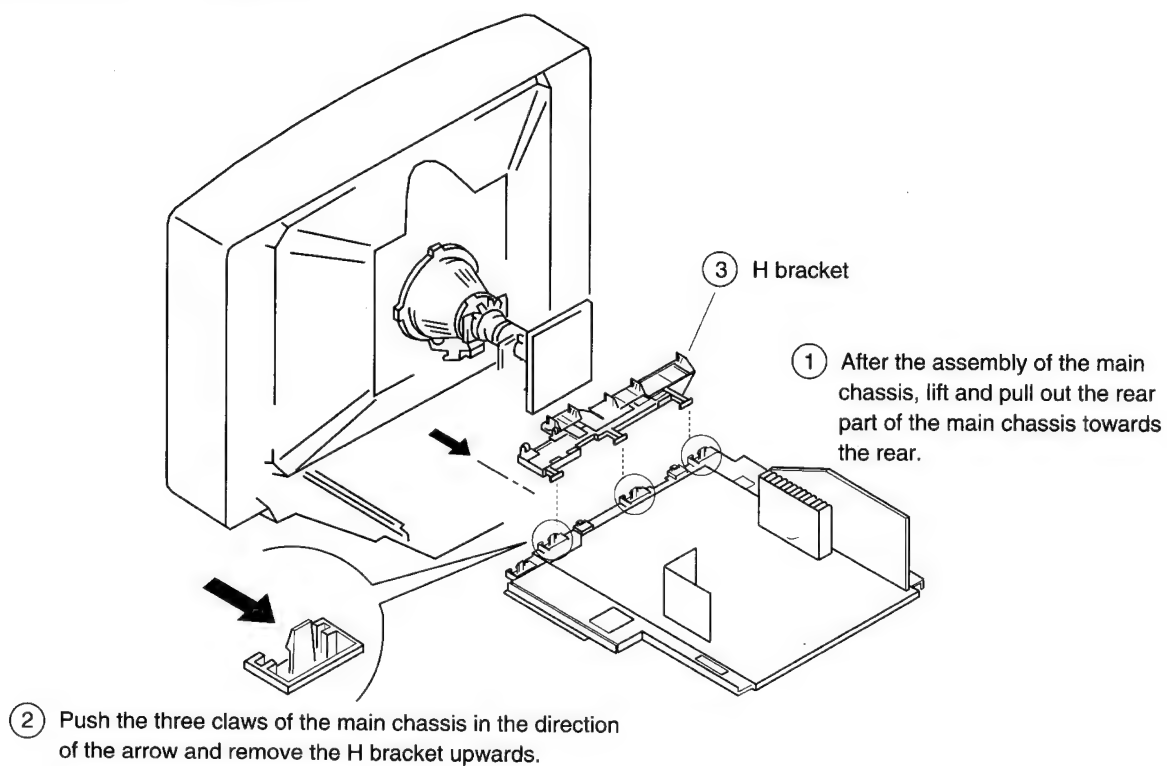


SECTION 2 DISASSEMBLY

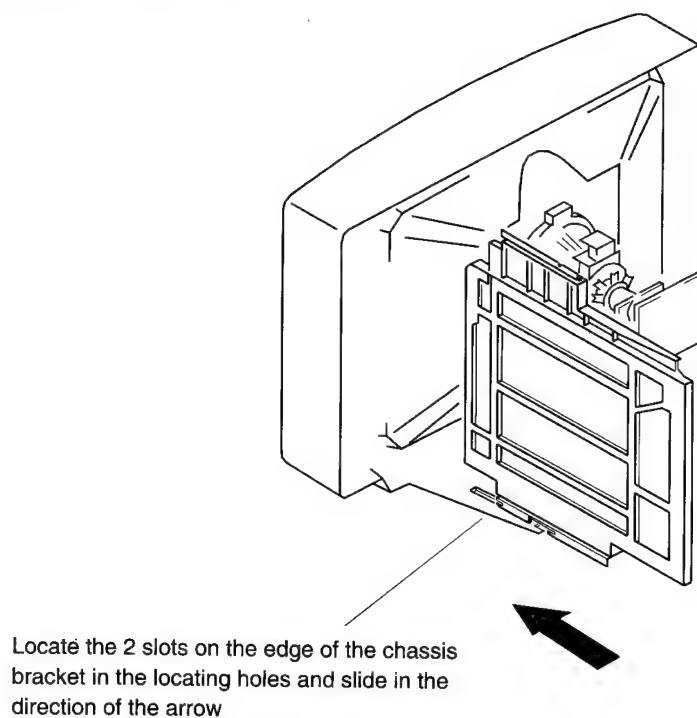
2-1. REAR COVER REMOVAL



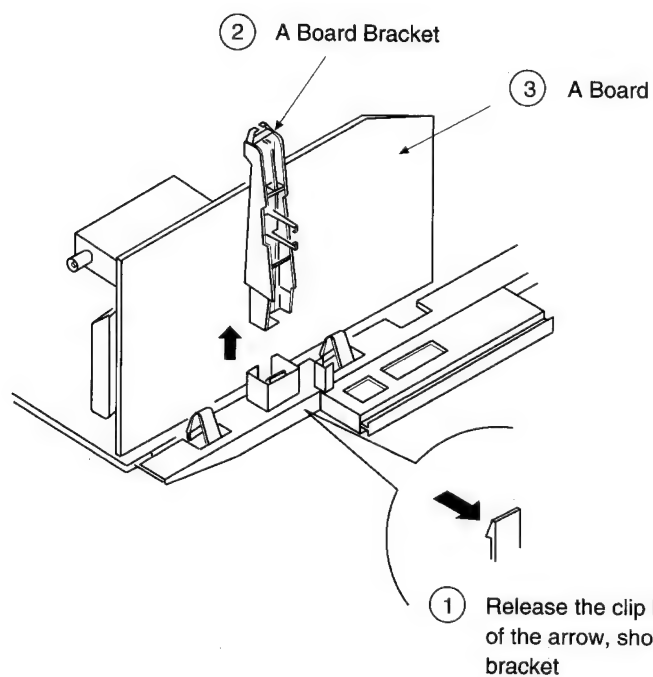
2-2. CHASSIS ASSY REMOVAL



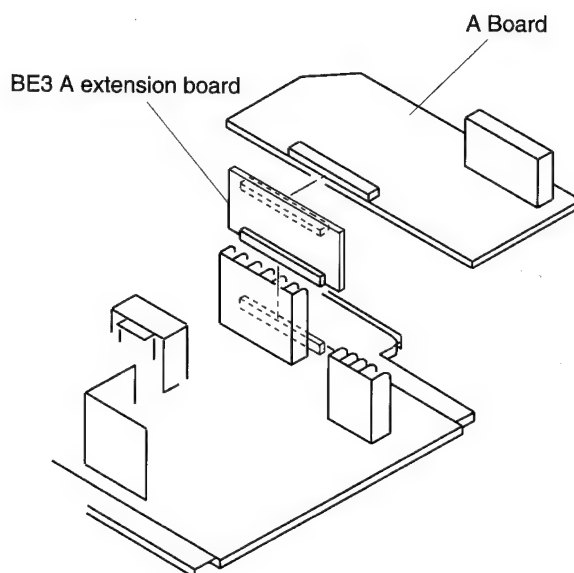
2-3. SERVICE POSITION



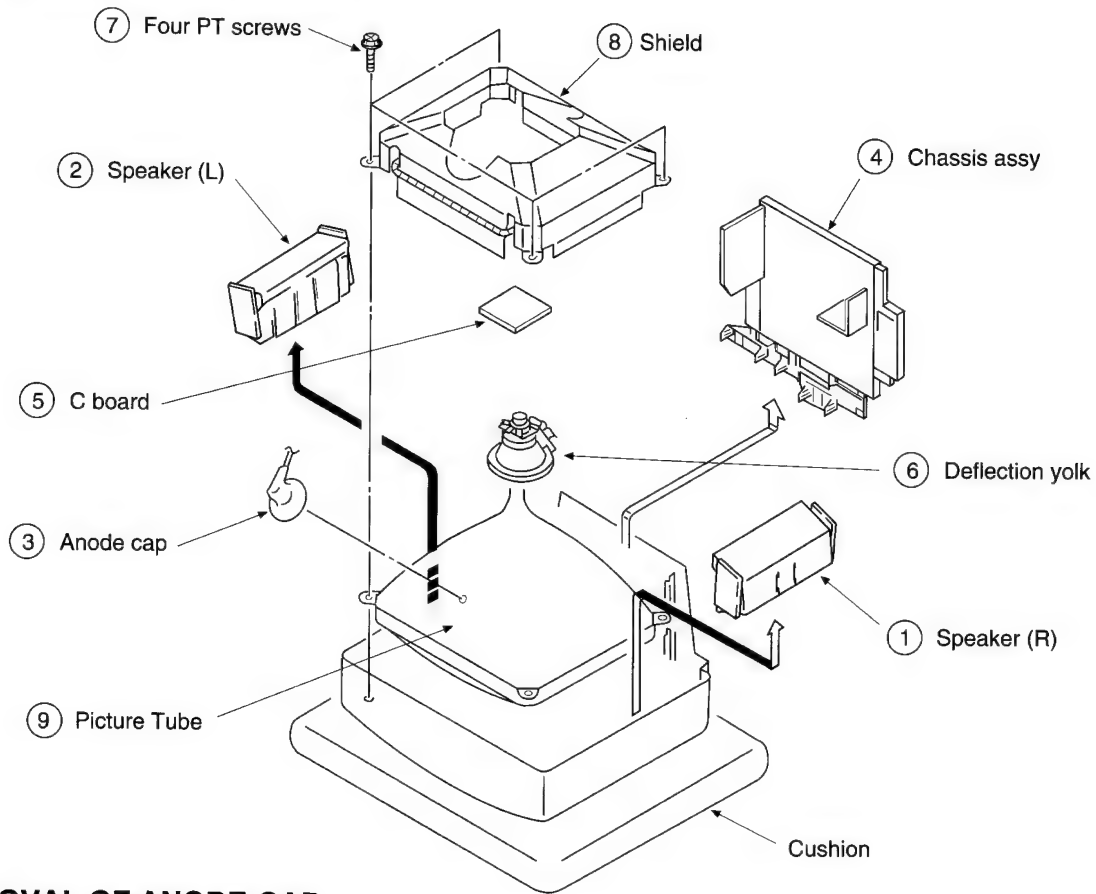
2-4. A BOARD REMOVAL



2-5. EXTENSION BOARD



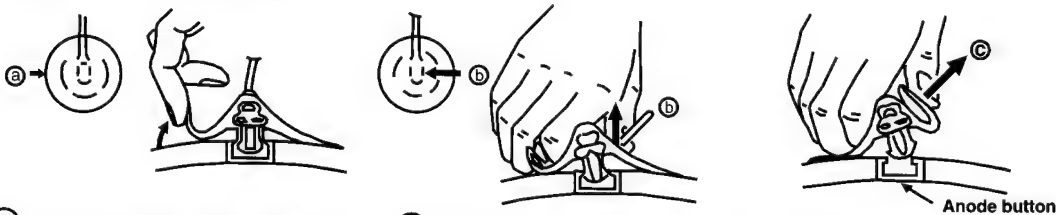
2-6. PICTURE TUBE REMOVAL



• REMOVAL OF ANODE-CAP

Note: Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.

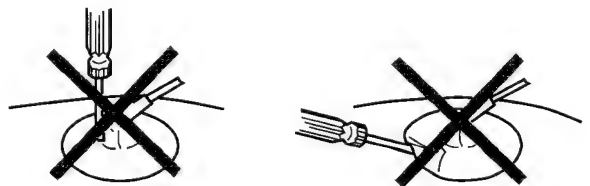
* REMOVING PROCEDURES.



- ① Turn up one side of the rubber cap in the direction indicated by the arrow **a**
- ② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow **b**
- ③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow **c**

• HOW TO HANDLE AN ANODE-CAP

- ① Don't damage the surface of anode-cap with sharp shaped material !
- ② Don't press the rubber hardly not to hurt inside of anode-caps !
A metal fitting called as shatter-hook terminal is built into the rubber.
- ③ Don't turn the foot of rubber over hardly !
The shatter-hook terminal will stick out or damage the rubber.



SECTION 3

SET - UP ADJUSTMENTS

- When complete readjustment is necessary or a new picture tube is installed, carry out the following adjustments.
- Unless there are specific instructions to the contrary, carry out these adjustments with the rated power supply.
- Unless there are specific instructions to the contrary, set the controls and switches to these settings :

① Contrast 80% (or remote control normal)
 ☆ Brightness 50%

- Carry out the following adjustments in this order :
 - Beam landing
 - Convergence
 - Focus
 - White balance

Note: Testing equipment required.

- Color bar/pattern generator
- Degausser
- DC power supply
- Digital multimeter
- Oscilloscope

Preparation:

- In order to reduce the influence of geomagnetism on the set's picture tube, face it east or west.
- Switch on the set's power and degauss with the degausser.

3-1. BEAM LANDING

- Input the white signal with the pattern generator.
 CONTRAST } normal
 BRIGHTNESS }
- Position neck assy as shown in Fig.3-2.
- Set the pattern generator raster signal to red.
- Move the deflection yoke forward and adjust with the purity control so that the red is at the center and the blue and the green take up equally sized areas on each side. (See Fig. 3-1 - 3-3)
- Move the deflection yoke forward and adjust so that the entire screen becomes red. (See Fig. 3-1)
- Switch the raster signal to blue, then to green and verify the condition.
- When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws.
- If the beam does not land correctly in all the corners, use a magnet to adjust it. (See Fig. 3-4)

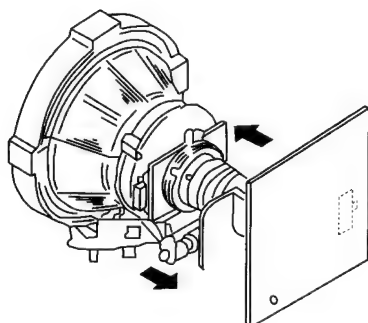


Fig. 3-1

Fig. 3-2

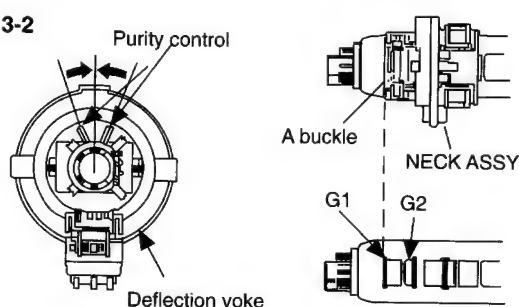


Fig. 3-3

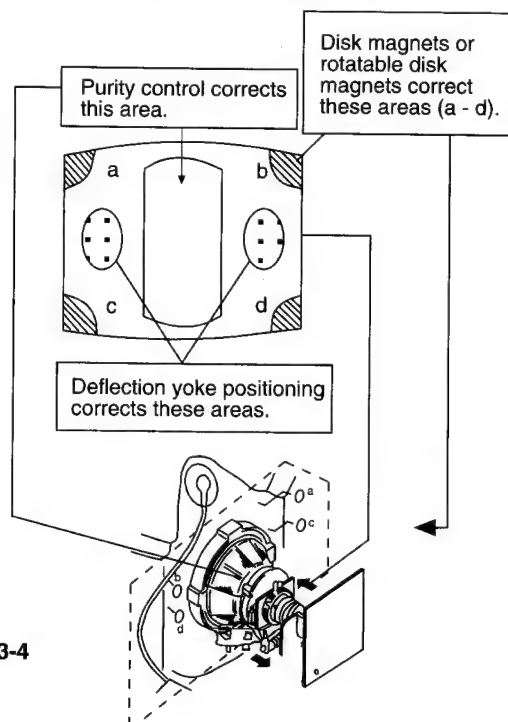
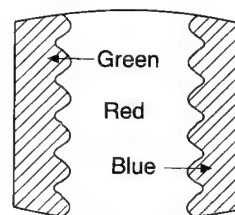


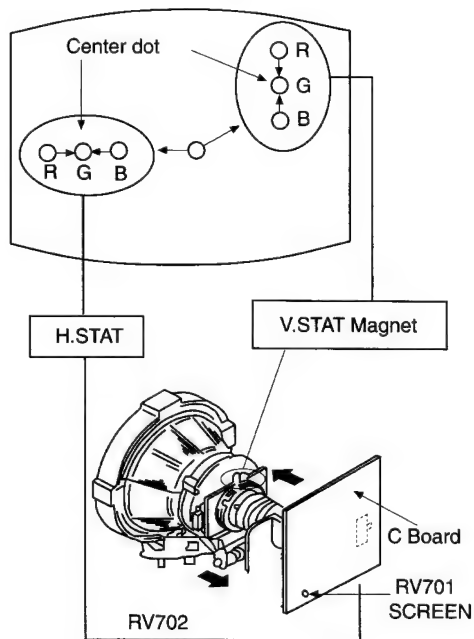
Fig. 3-4

3-2. CONVERGENCE

Preparation:

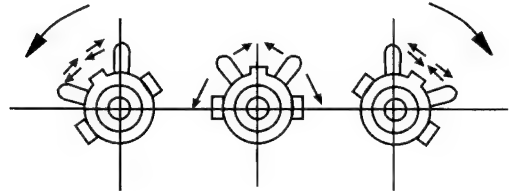
- Before starting this adjustment, adjust the focus, horizontal size, and vertical size.
- Minimize the brightness setting.
- Provide a dot pattern.

(1) Horizontal and vertical static convergence

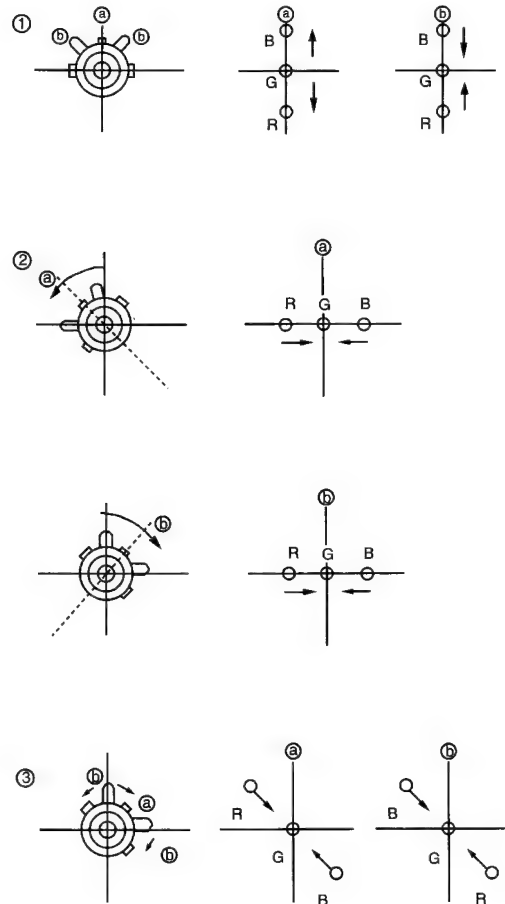


1. (Moving horizontally), adjust the H.STAT control so that the red, green, and blue points are on top of each other at the center of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green, and blue points are on top of each other at the center of the screen.
3. If the H.STAT variable resistor cannot bring the red, green, and blue points together at the center of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V.STAT magnet in the manner given below.
(In this case, the H.STAT variable resistor and the V.STAT magnet influence each other)

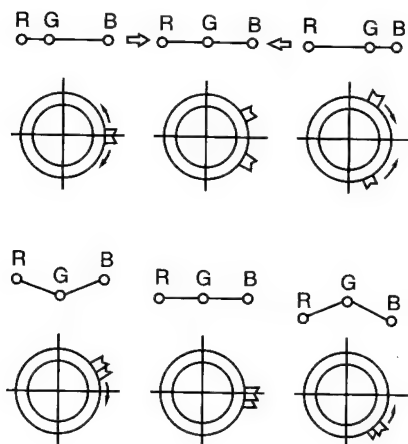
- Tilt the V.STAT magnet and adjust the static convergence by opening or closing the V.STAT magnet.



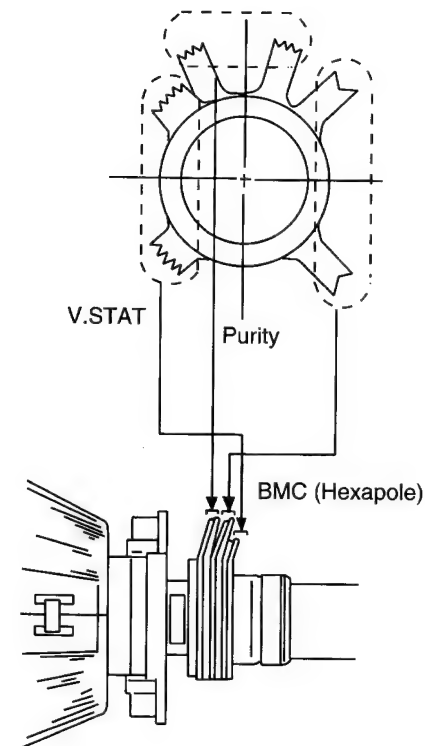
4. If the V.STAT magnet is moved in the direction of the (a) and (b) arrows, the red, green, and blue points move as shown below.



- Operation of BMC (Hexapole) Magnet



- The respective dot position resulting from moving each magnet interact, so be sure to perform adjustment while tracking. Use the H.STAT VR to adjust the red, green, and blue dots so they coincide at the center of the screen (by moving the dots in the horizontal direction).

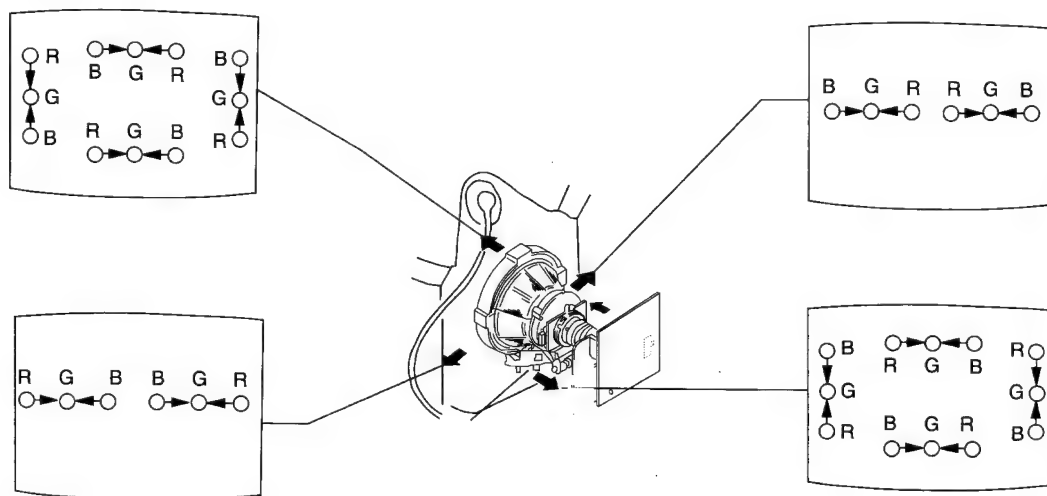


(2) Dynamic convergence adjustment.

Preparation:

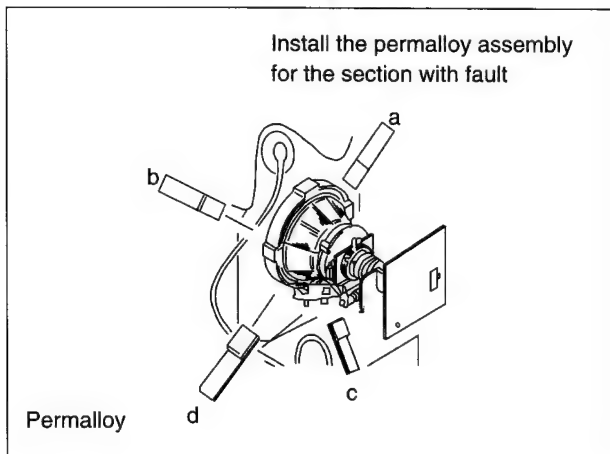
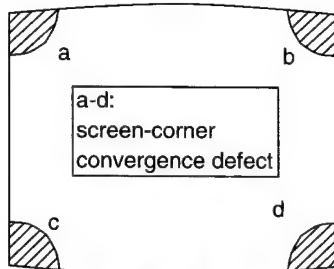
- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence.
- Slightly loosen the deflection yoke screws.

- Remove the deflection yoke spacer.
- Move the deflection yoke as shown in the figure below and optimize the convergence.
- Tighten the deflection yoke screws.
- Re-install the deflection yoke spacer.

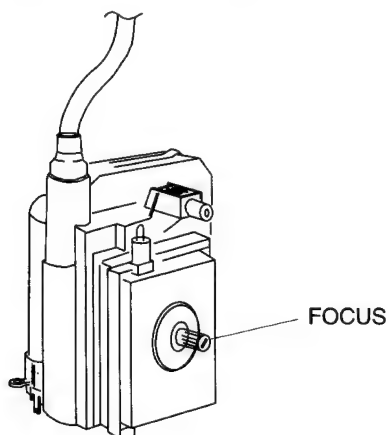


(4) Screen corner convergence.

If you are unable to adjust the corner convergence properly, correct them with the use of permalloy assemblies.

**3-3. Focus**

Adjust the focus to optimize the screen.

**3-4. WHITE BALANCE****Screen G2 Setting**

1. Input the dot signal from the pattern generator.
2. Set the picture brightness control to its lowest level.
3. Apply 180V DC to the R,G, and B cathodes with an external power supply.
4. While watching the picture, adjust G2 control RV701 (Screen) to the point just before the return lines disappear.

White balance adjustment

1. Receive an all-white signal.
2. Enter into service mode. (Refer to the section 4 "Electrical Adjustment" on how to enter service mode.)
3. Select TDA8366 1 on menu.

DEVICE : TDA8366 1

STAT : 12

- ☐ NEXT
- ☐ PREVIOUS
- ☐ OK

USE COLOUR KEYS
SONY TEST MENU.

4. Press the White button on the Remote Commander to enter into the device Menu.
5. Press the Red button 10 times "Next" "Next" "Next" to select HWB RED, adjust to 040.
6. Press the Red button to select HWB GREEN, adjust with the + and - menu buttons so that the white balance becomes optimum.
7. Press the Red button to select HWB BLUE, adjust with the + and - menu buttons so that the white balance becomes optimum.
8. Press the TV button twice on the Remote Commander to store the data and return to TV operation.

SECTION 4

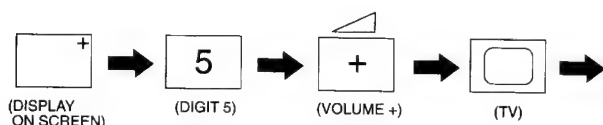
CIRCUIT ADJUSTMENTS

4-1. ELECTRICAL ADJUSTMENTS

Service adjustment to this model can be performed with the supplied remote commander RM-833.

HOW TO ENTER INTO SERVICE MODE

1. Turn on the main power switch of the set and enter into standby mode.
2. Press the following sequence of buttons on the Remote Commander.



"TT" will appear in the top right corner of the screen.
Other status information will also be displayed.

3. Press the MENU button on the Remote Commander to obtain the menu on the screen.

<div>DEVICE NAME</div> <p>STAT : xxxx</p> <p><input type="checkbox"/> NEXT</p> <p><input type="checkbox"/> PREVIOUS</p> <p><input type="checkbox"/> OK</p> <p>USE COLOUR KEYS SONY TEST MENU.</p>

4. Press the Red (Next) and Green (Previous) buttons to select the device corresponding to the adjustment item from the table. Then press the White button (OK).

<div>DEVICE NAME</div> <p>00 ADJUSTMENT : xxx</p> <p><input type="checkbox"/> NEXT</p> <p><input type="checkbox"/> PREVIOUS</p> <p>SELECT COL.BUTTON CHANGE BY MENU +/-</p>

5. Press the Red (Next) or Green (previous) buttons to select the adjustment item. Then press the and buttons to change the data to comply with each standard.
6. Turn off the power to quit the service mode when adjustments are completed.

Initial Conditions for setup of TDA8366, TDA6612 and SAA7283. (Stereo Models Only)

TDA8366 1	INIT VALUE	TDA8366 2	INIT VALUE
Hue	31	Interface	00
H Shift	Adj	Sync Mode	00
H Size	Adj	Col Dec	00
Pin Amp	Adj	Vert Div	00
Corn Pin	Adj	Vid ID	00
Tilt	Adj	EHT Track	01
V.Linear	Adj	En V Grd	00
V.Size	Adj	Serv Blk	00
S.Corr	Adj	OVP Mode	00
V.Cent	Adj	Aspect R	00
HWB Red	Adj	Start Freq	00
HWB Green	Adj	Y/C Input	00
HWB Blue	Adj	PAL/NTSC	00
Peaking	8	Xtal PLL	00
Bright	32	Y Delay	07
Colour	32	RGB Blk	00
Picture	37	Noise Cor	00
AGC Set	00	Fast Blk	01
Src Sel 1	00	AFC Wind	00
Src Sel 2	00	IF Sensy	00
Time Con	03	Mod Std	00
Xtal Ind	03	Vid Mute	01
FF Freq	02		

TDA6612	INIT VALUE	TDA6612	INIT VALUE
MPX Per	00	Mute 2	01
Quasi St	00	C1/2LS	00
Bass Exp	00	C1/2KH	00
H Pulse	00	Mono	01
Matrix St	00	Scart	00
Bypass	00	Scart D	00
Vol L Sp	07	AM	00
Vol R Sp	07	SAA7283	INIT VALUE
Vol HP	00	Mon M1/M2	01
PII Sync	00	DM Select	01
Mute 3	01	SSWIT 123	07
Treble	08	Port 2	00
Bass	09	Mute Def	00
X Talk Adj	Adj	AMDIS	00
Mute 1	00	E Max	80
		E Min	01

4-2. TEST MODE 2 :

Is available by pressing Test button twice, OSD 'TT ' appears. The functions described below are available by pressing the two numbers. To release the Test Mode 2, press 0 twice, or switch the TV into Stand-by Mode.

00	switch Test Mode 2 off
01	picture maximum
02	picture minimum
03	Volume 35%
04	Volume 50%
05	Volume 65%
06	Volume 80%
07	Ageing Condition (Volume min., Picture max., Brightness max.)
08	Shipping Condition (Analog Values are RESET due to factory setting, Prog 1 is selected, TT Mode is switched off)
09	"Menu" Flag request
10	Tenth entry is deleted
11	dummy
12	dummy
13	dummy
14	Forced AV 16:9 detection on/off
15	Read factory setting from NVM Reads Volume, Balance, Treble, Bass, Brightness, Contrast, Hue, Sharpness, Colour values from ROM to the actual used values (Last Power Memory)
16	Save actual used values as RESET values Memorize actual used values Balance, Treble, Bass, Hue, Sharpness at RESET position in NVM.
17	Preset Label for AV Sources
18	RGB Priority on/off
19	Clear all preset labels
20	Tenth entry is deleted
21	Sub Contrast
22	Sub Colour
23	Sub Brightness
24	Set destination = U RGB Priority = Off
25	Set destination = D RGB Priority = Off
26	Set destination = B RGB Priority = On
27	Set destination = K RGB Priority = Off
28	Set destination = L RGB Priority = Off
29	Set destination = E RGB Priority = Off

30	Tenth entry is deleted
31	Set Destination = A RGB Priority = On
32	dummy
33	Auto AGC
34	N/S Pin Adjust
35	Manual AGC Adjust
36	dummy
37	dummy
38	dummy
39	dummy
40	Tenth entry is deleted
41	Re-initialise NVM
42	Production use only
43	Initialise Geom Settings
44	Initialise all favorite pages = 100
45	Channel locks = off
46	IR Channel Presetting Mode The channel presetting can be done by a Special IR Transmitter (Ver 2 and above software only)
47	dummy
48	Set NVM testbyte to 44h
49	Erase the NVM Testbyte (this byte detects already stored NVM's) After selecting this function, switch TV Off and On -> the NVM will be preset by μ -Controller.

In Test Mode the Menu display is switchable by the Speaker-Off button.

Note : For Test Modes 41 - 49 it is necessary to ensure that the TV is set to Prog 59.

SUB BRIGHTNESS ADJUSTMENT

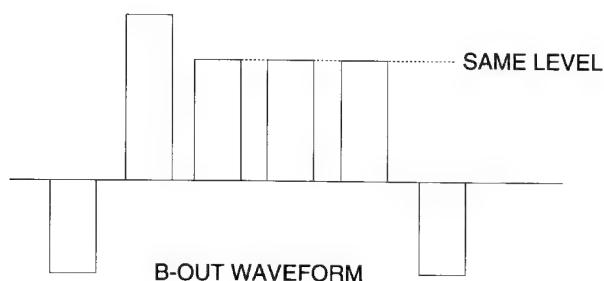
1. Input a Phillips pattern.
2. Enter into service mode and press 23.
3. Adjust data so that 0-IRE of grey scale and CUT-OFF 20-IRE are only slightly visible on screen.

SUB CONTRAST ADJUSTMENT

1. Input a video that contains a small 100% area on a Black Background.
2. Enter into service mode and press 01 to have PIC max followed by 21.
3. Connect oscilloscope to pin ① of CN703 (R OUT) and adjust HWB Red data of TDA8366 1 to obtain 2.3Vp-p.

SUB COLOR ADJUSTMENT

1. Input a PAL color bar signal.
2. Connect an oscilloscope to pin ③ of CN703 (B OUT) on the C board.
3. Enter into service mode and press 22.
4. Adjust data so that the right sides of the waveform are set to the same level.

**STEREO SEPARATION ADJUSTMENT**

1. Input a 1KHz stereo signal to the L-ch and a 400Hz stereo signal to the R-ch.
2. Enter into service mode and select the "Test Menu" to be TDA6612.
3. Select the Stereo Xtalk Adjustment Menu, by using the Red (Next) and Green (Previous) buttons.
4. Monitor the Scart 1 L-channel output and adjust the data so that the R-channel sound is not detected in the L-channel.

I.F. COIL ADJUSTMENT (T101) - B/G, D/K, I AND L STANDARD FOR CONTINENTAL MODELS.

1. Apply a 38.9MHz signal at 100dBuV to the input of SWF101.
2. Receive a channel so that the I.C. is selected for negative modulation.
3. Measure the voltage at the AFT test point and adjust (T101) to obtain 2.4V +/- 0.2V.

I.F. COIL ADJUSTMENT (T101) - I, STANDARD FOR U.K. MODELS.

1. Apply a 39.5MHz signal at 100dBuV to the input of SWF101.
2. Receive a channel so that the I.C. is selected for negative modulation.
3. Measure the voltage at the AFT test point and adjust (T101) to obtain 2.4V +/- 0.2V.

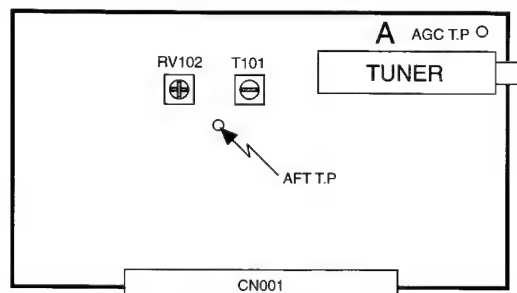
L, BAND 1 ADJUSTMENT (RV102) - L, STANDARD FOR FRENCH MODELS.

1. Apply a 33.95MHz signal at 100dBuV to the input of SWF101.
2. Receive a channel so that the I.C. is selected for positive modulation and system L band 1.
3. Measure the voltage at the AFT test point and adjust (RV102) to obtain 2.4V +/- 0.2V.

Note : Only adjust RV102 after T101 has been correctly adjusted.

AGC ADJUSTMENT

1. Receive an off- air signal.
2. Enter the service mode, ("Test" "Test") and 35.
3. Adjust the data so that there is no snow or cross - modulation visible on the screen.
4. Change the receiving off-air channel, and confirm the above status.



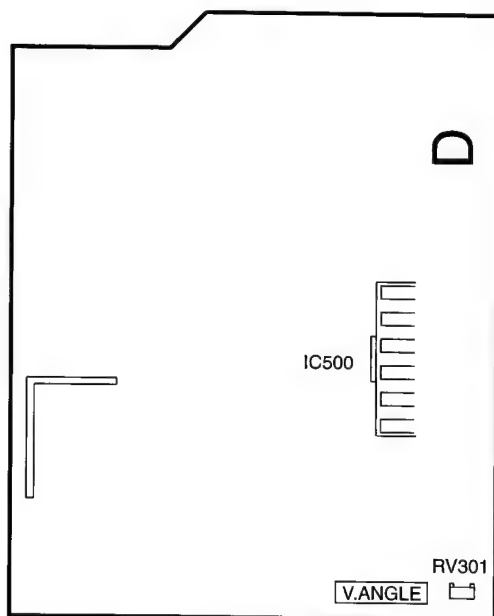
- A Board component side -

DEFLECTION SYSTEM ADJUSTMENT

1. Enter into service mode.
2. Select and adjust each item in order to obtain the optimum image.

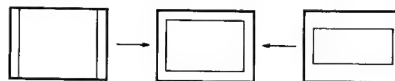
Item No	Adjustment item.	Data Amount
03	H SHIFT	ADJ.
04	H SIZE	ADJ.
05	PIN AMP	ADJ.
06	CORR PIN	ADJ.
07	TILT	ADJ.
08	V LINEAR	ADJ.
09*	V SIZE	ADJ.
0A	S CORR	ADJ.
0B	V CENTER	ADJ.

Note : V ANGLE is adjusted by a Variable Resistor on the 'D' Board (RV301)



- D Board Component Side -

V SIZE



V CENTER



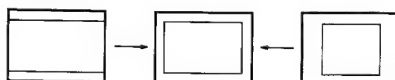
S CORR



V LIN



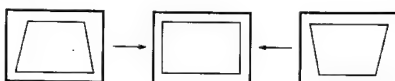
H SIZE



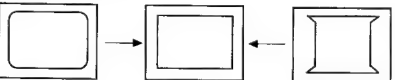
PIN AMP



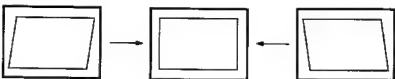
TILT



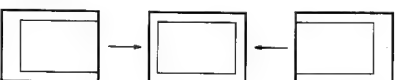
CORR PIN



V ANGLE



H SHIFT



4-3. BE3 SELF DIAGNOSTIC SOFTWARE

The identification of errors within the BE-3 chassis is triggered in 1 of 2 ways :- 1: Bus busy or 2: Device failiure to respond to IIC. In the event of one of these situations arising the software will first try to release the bus if busy (Faiilure to do so will report with continous flashing LED) and then communicate with each device in turn to establish if a device is faulty. If a device is found to be faulty the relevant device number will be displayed through the led (Series of flashes which must be counted) See Table 1., on fatal errors are reported with this method.

If a fatal error is found the set will simply stay in whichever state it was when the error occurred, but if a non fatal error occurs the set will try to continue operation.

Table 1

Device	LED Error Count	Fatal Error
NVM	2 .. 9	√
Teletext	10	
Jungle	11	√
Video_sw	12	
Tuner	13	√
Nicam	14	
Audio_cont	15	√

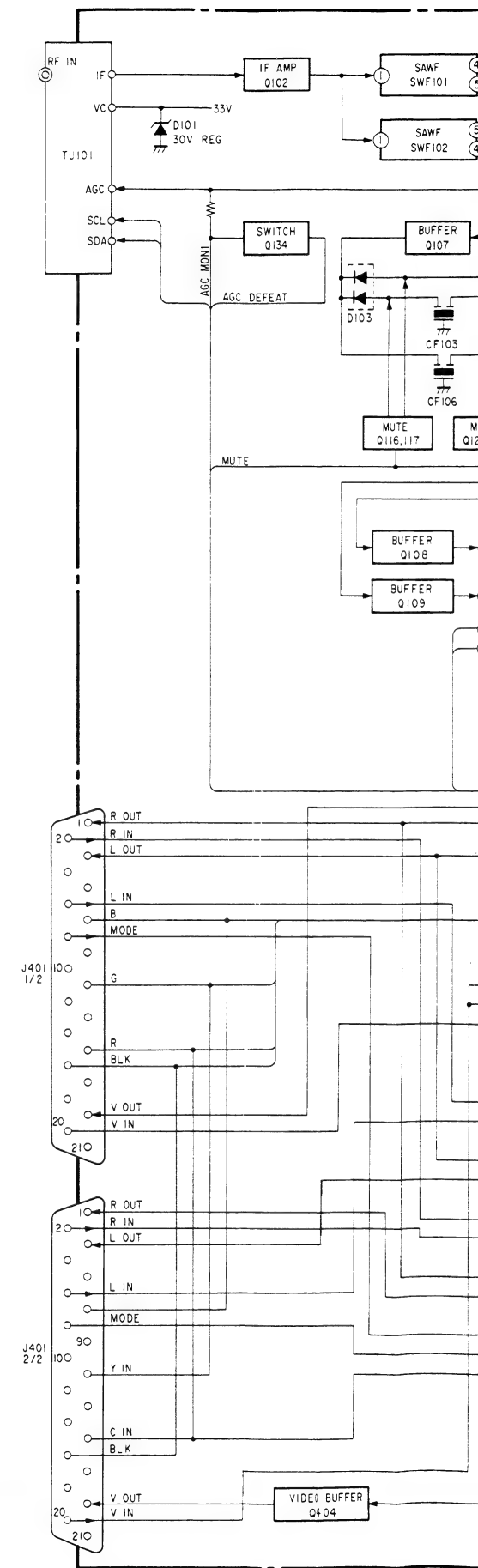
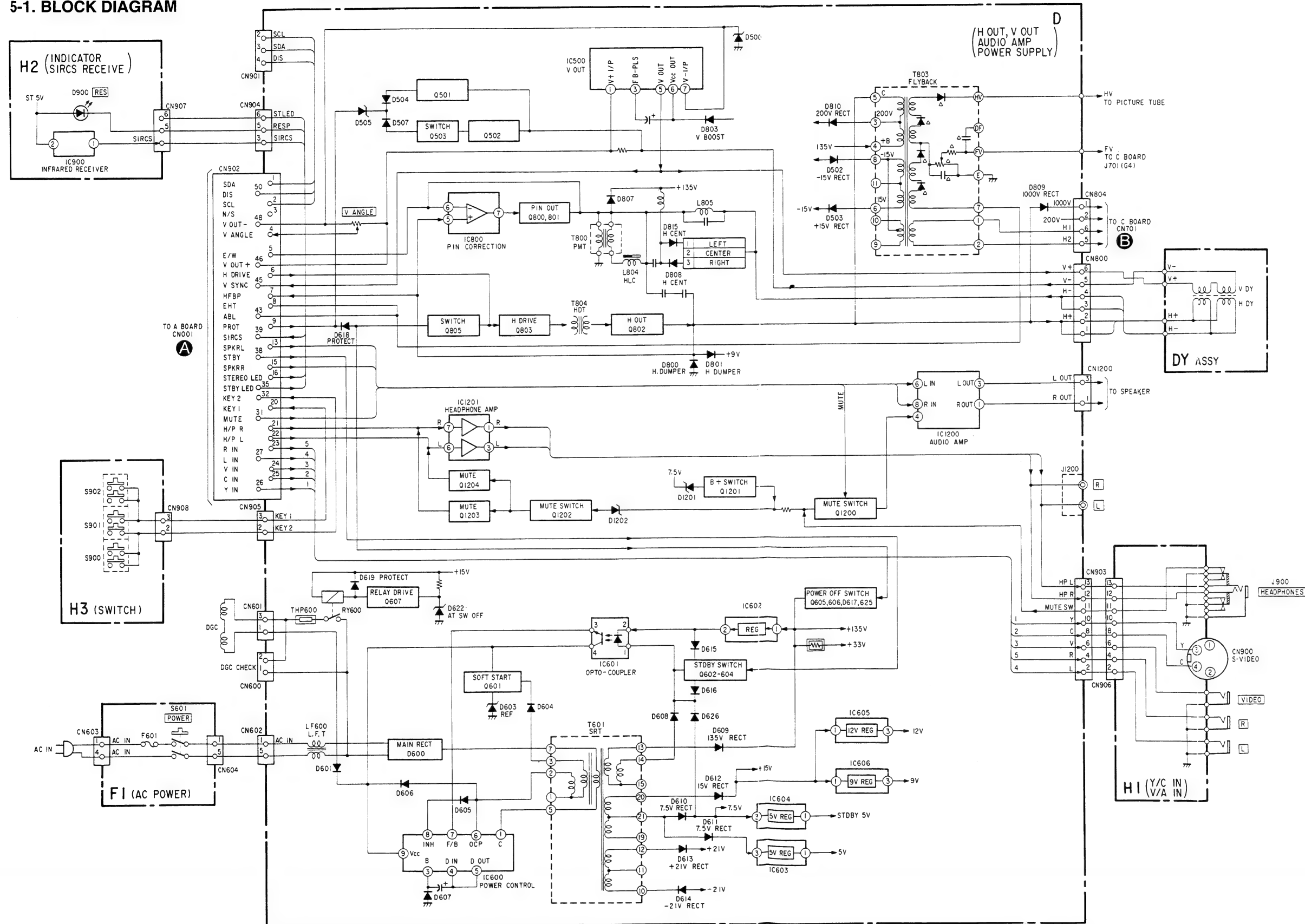
Flash Timing Example : e.g. error number 3.

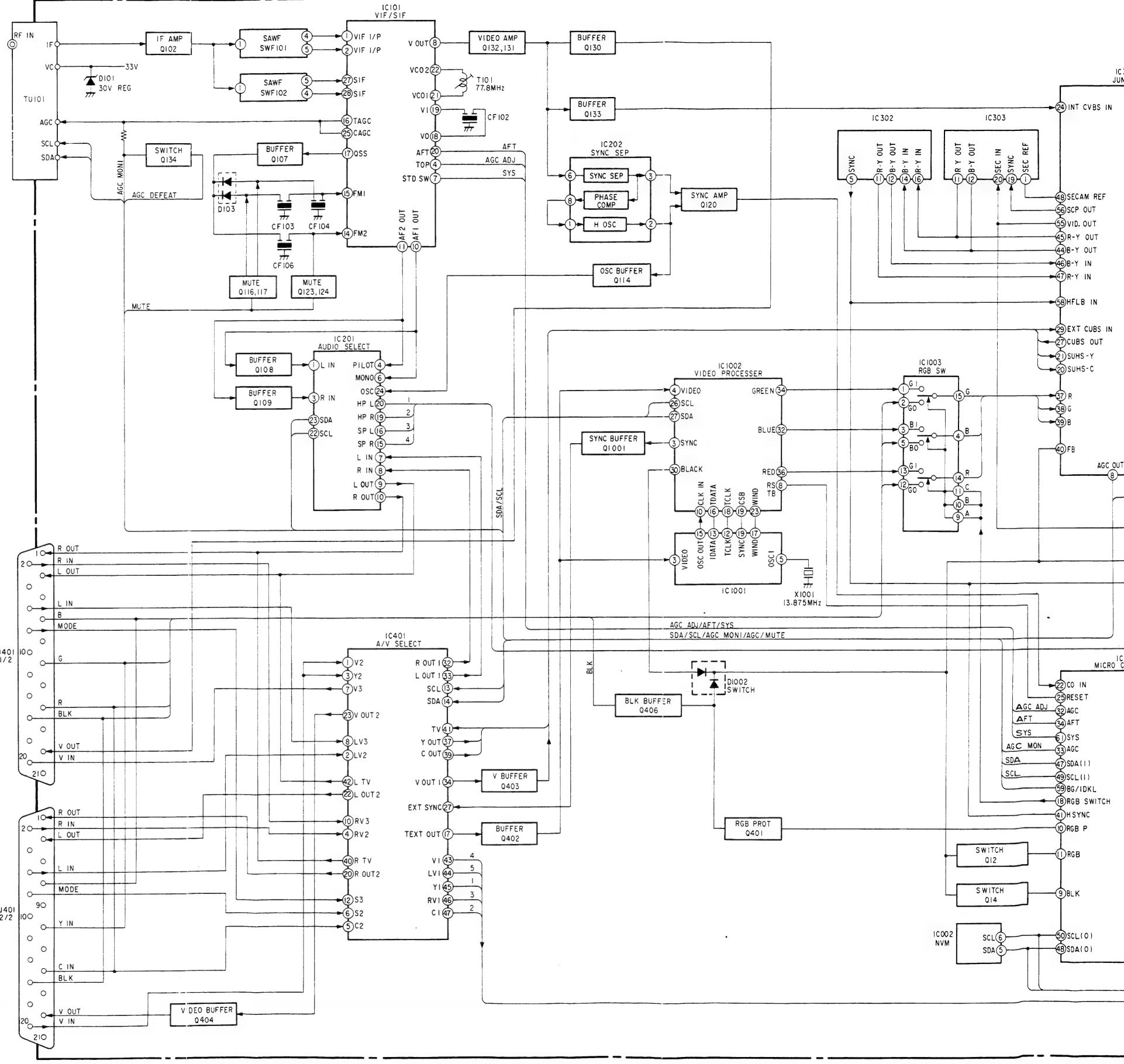
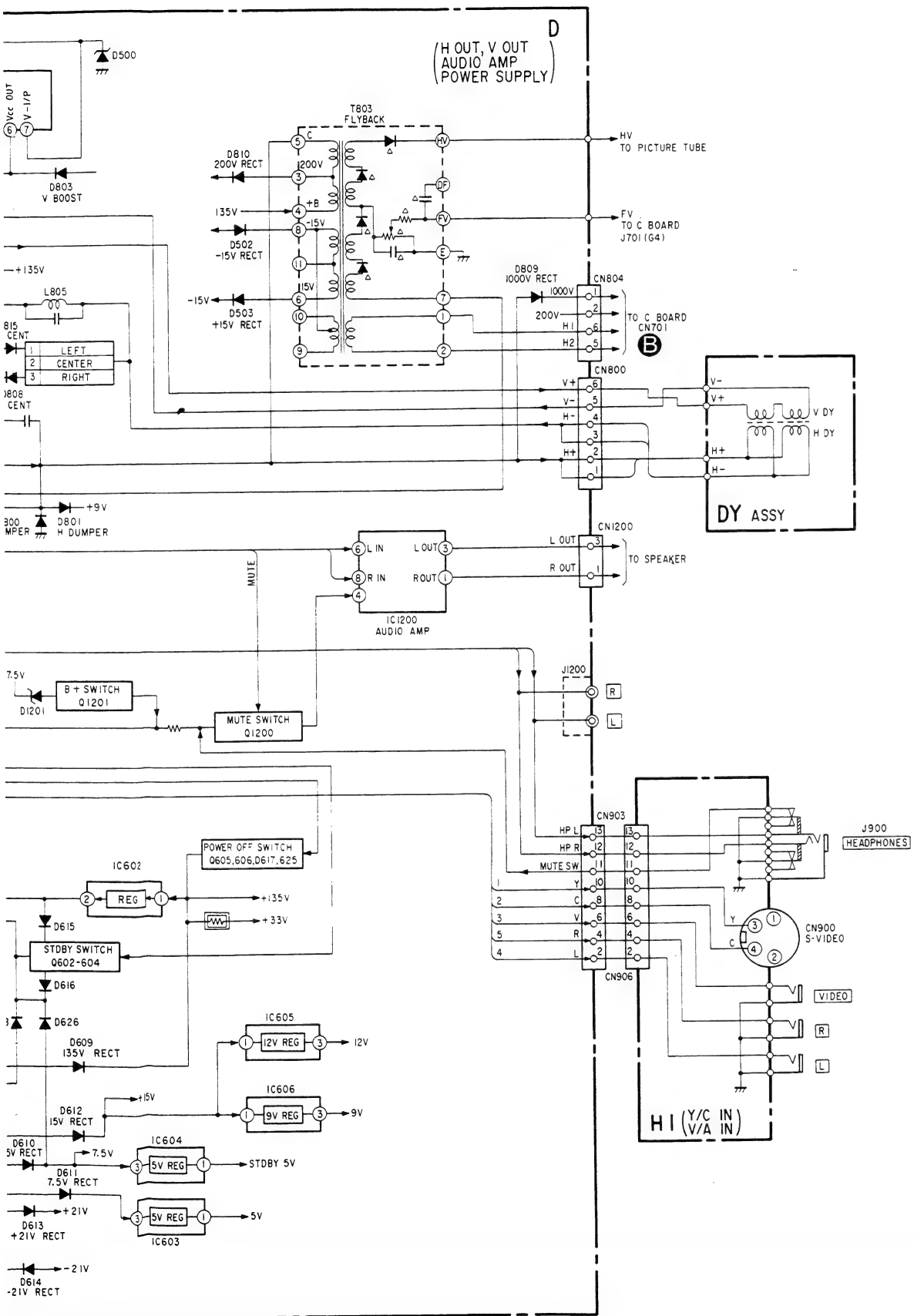
Stby LED

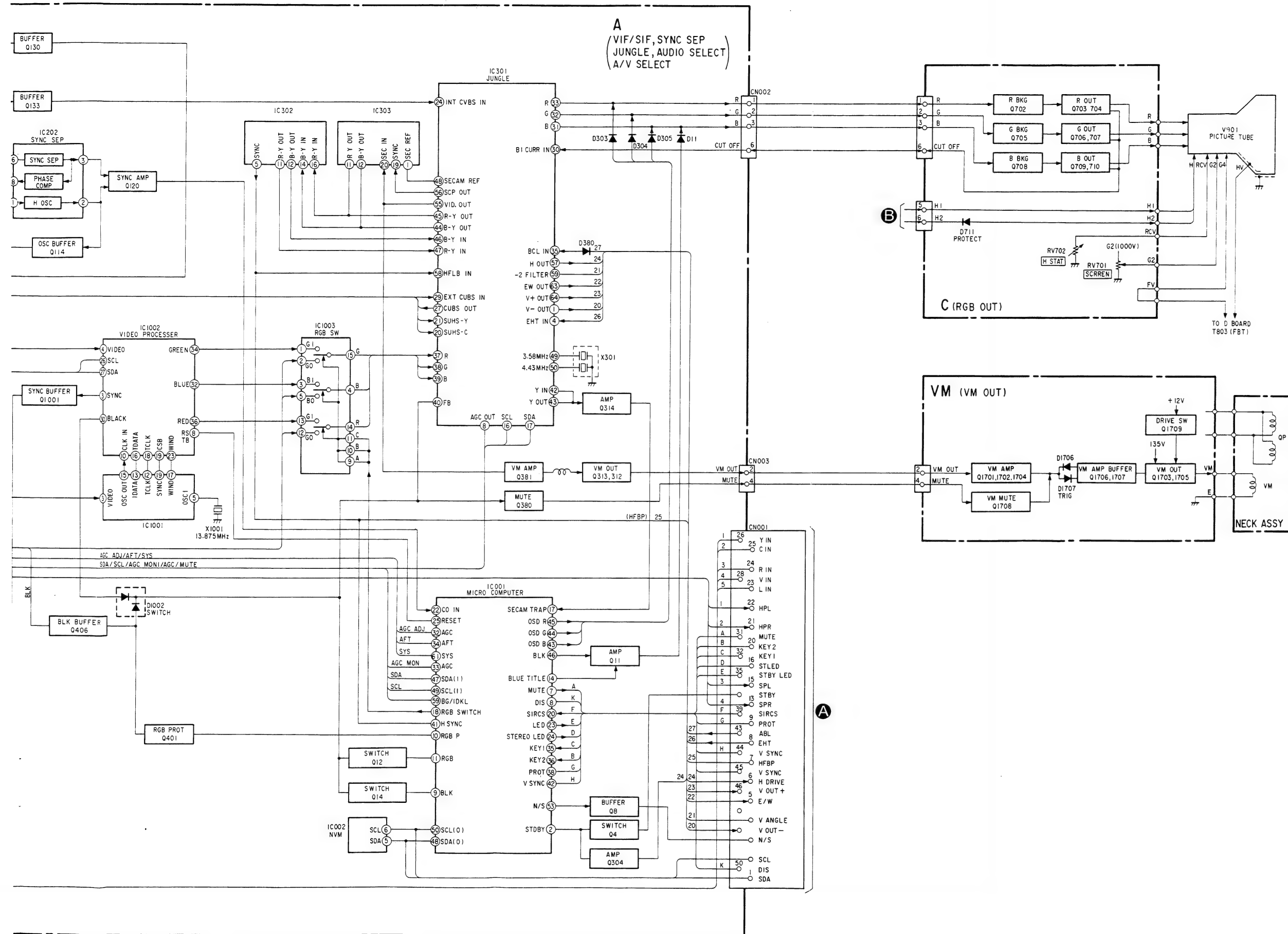


SECTION 5
DIAGRAMS

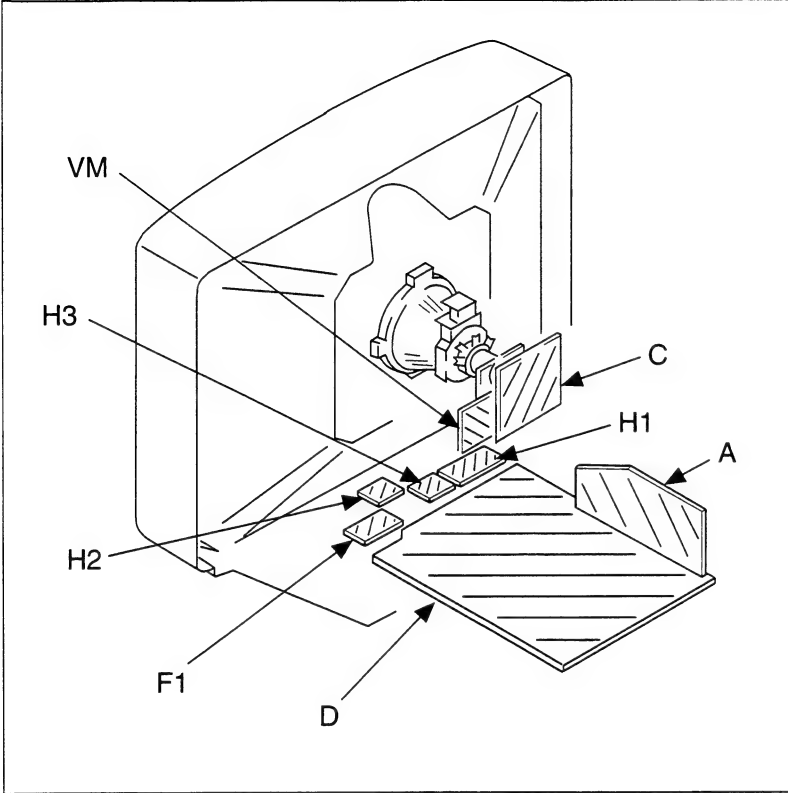
5-1. BLOCK DIAGRAM







5-2. CIRCUIT BOARDS LOCATION



Reference information

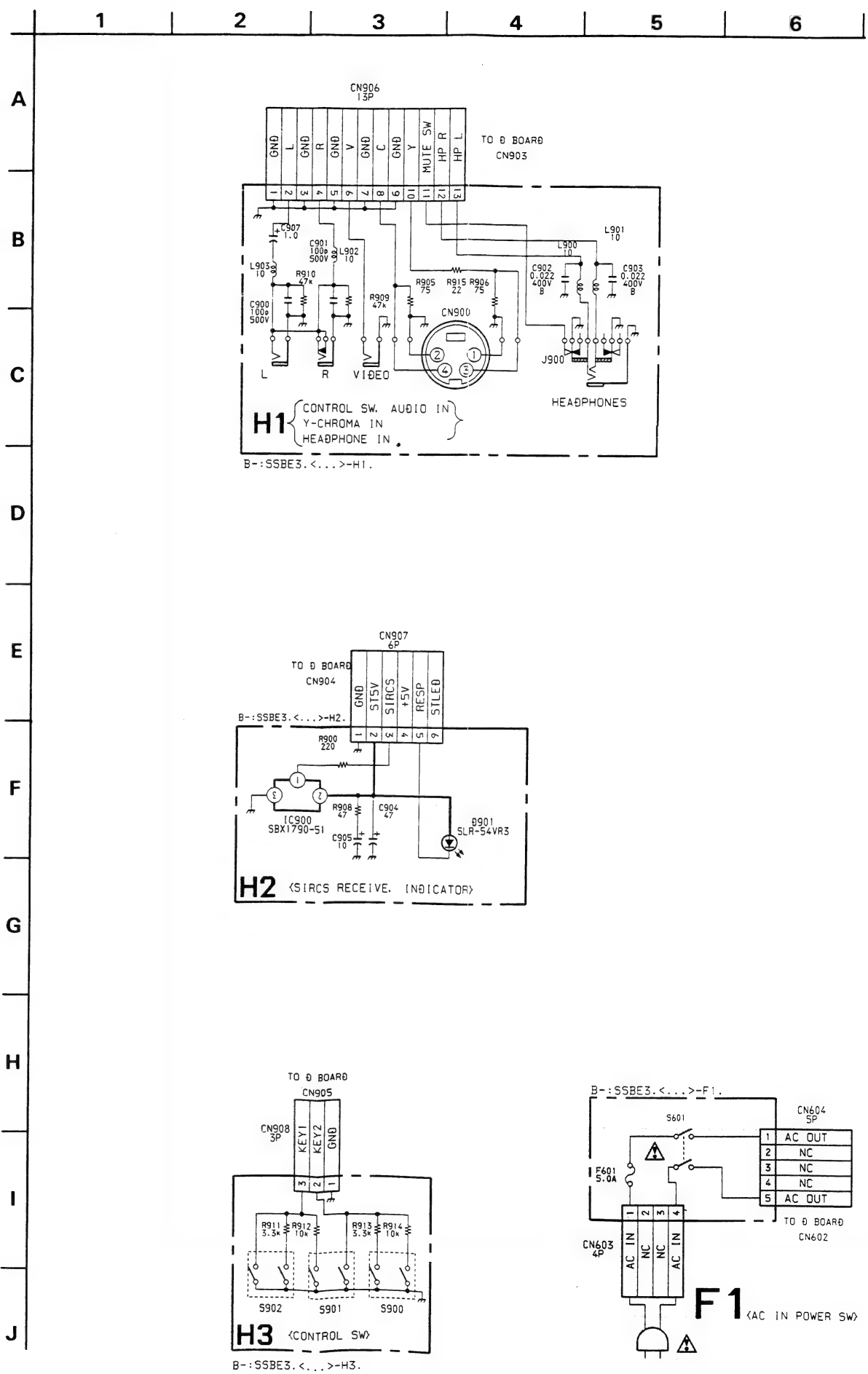
RESISTOR	RN	: METAL FILM
	RC	: SOLID
	FPRD	: NONFLAMMABLE CARBON
	FUSE	: NONFLAMMABLE FUSIBLE
	RS	: NONFLAMMABLE METAL OXIDE
	RB	: NONFLAMMABLE CEMENT
	RW	: NONFLAMMABLE WIREWOUND
	*	: ADJUSTMENT RESISTOR
COIL	LF-8L	: MICRO INDUCTOR
CAPACITOR	TA	: TANTALUM
	PS	: STYROL
	PP	: POLYPROPYLENE
	PT	: MYLAR
	MPS	: METALIZED POLYESTER
	MPP	: METALIZED POLYPROPYLENE
	ALB	: BIPOLAR
	ALT	: HIGH TEMPERATURE
	ALR	: HIGH RIPPLE

Note: The components identified by shading and mark are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par une trame et par une marque sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié.

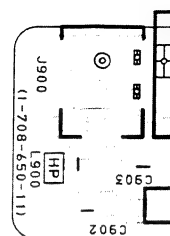
5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

- Note :
- All capacitors are in μF unless otherwise noted.
 pF : $\mu \mu F$ 50WV or less are not indicated except for electrolytic.
 - Indication of resistance, which dose not have one for rating electrical power, is as follows.
Pitch : 5mm
Rating electrical power : 1/4W
 - Chip resistor is in 1/10W.
 - All resistors are in ohms.
 $k \Omega = 1000 \Omega$, $M \Omega = 1000K \Omega$
 - : nonflammable resistor.
 - : fusible resistor.
 - Δ : internal component.
 - : panel designation or adjustment for repair.
 - All variable and adjustable resistors have charactristic curve B, unless otherwise noted.
 - All voltages are in V.
 - Readings are taken with a 10M Ω digital multimeter.
 - Readings are taken with a color-bar signal input.
 - Voltage variations may be noted due to normal production tolerances.
 - : B+ bus.
 - : B- bus.
 - : signal path.(RF)
 - : earth - ground
 - : earth - chassis

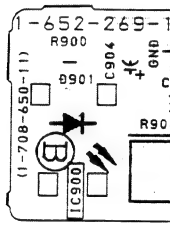


H1

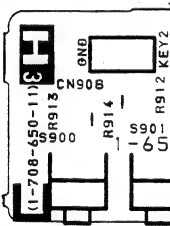
- H1 BOARD



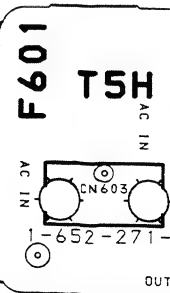
- H2 BOARD



- H3 BOARD



- F1 BOARD

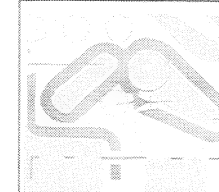


	THV OUT	PIN OUT	POWE
1	1.0	1.0	1.0
2	1.0	1.0	1.0
3	1.0	1.0	1.0
4	1.0	1.0	1.0
5	1.0	1.0	1.0
6	1.0	1.0	1.0
7	1.0	1.0	1.0
8	1.0	1.0	1.0
9	1.0	1.0	1.0
10	1.0	1.0	1.0
11	1.0	1.0	1.0
12	1.0	1.0	1.0
13	1.0	1.0	1.0
14	1.0	1.0	1.0
15	1.0	1.0	1.0
16	1.0	1.0	1.0
17	1.0	1.0	1.0
18	1.0	1.0	1.0
19	1.0	1.0	1.0
20	1.0	1.0	1.0
21	1.0	1.0	1.0
22	1.0	1.0	1.0
23	1.0	1.0	1.0
24	1.0	1.0	1.0
25	1.0	1.0	1.0
26	1.0	1.0	1.0
27	1.0	1.0	1.0
28	1.0	1.0	1.0
29	1.0	1.0	1.0
30	1.0	1.0	1.0
31	1.0	1.0	1.0
32	1.0	1.0	1.0
33	1.0	1.0	1.0
34	1.0	1.0	1.0
35	1.0	1.0	1.0
36	1.0	1.0	1.0
37	1.0	1.0	1.0
38	1.0	1.0	1.0
39	1.0	1.0	1.0
40	1.0	1.0	1.0
41	1.0	1.0	1.0
42	1.0	1.0	1.0
43	1.0	1.0	1.0
44	1.0	1.0	1.0
45	1.0	1.0	1.0
46	1.0	1.0	1.0
47	1.0	1.0	1.0
48	1.0	1.0	1.0
49	1.0	1.0	1.0
50	1.0	1.0	1.0
51	1.0	1.0	1.0
52	1.0	1.0	1.0
53	1.0	1.0	1.0
54	1.0	1.0	1.0
55	1.0	1.0	1.0
56	1.0	1.0	1.0
57	1.0	1.0	1.0
58	1.0	1.0	1.0
59	1.0	1.0	1.0
60	1.0	1.0	1.0
61	1.0	1.0	1.0
62	1.0	1.0	1.0
63	1.0	1.0	1.0
64	1.0	1.0	1.0
65	1.0	1.0	1.0
66	1.0	1.0	1.0
67	1.0	1.0	1.0
68	1.0	1.0	1.0
69	1.0	1.0	1.0
70	1.0	1.0	1.0
71	1.0	1.0	1.0
72	1.0	1.0	1.0
73	1.0	1.0	1.0
74	1.0	1.0	1.0
75	1.0	1.0	1.0
76	1.0	1.0	1.0
77	1.0	1.0	1.0
78	1.0	1.0	1.0
79	1.0	1.0	1.0
80	1.0	1.0	1.0
81	1.0	1.0	1.0
82	1.0	1.0	1.0
83	1.0	1.0	1.0
84	1.0	1.0	1.0
85	1.0	1.0	1.0
86	1.0	1.0	1.0
87	1.0	1.0	1.0
88	1.0	1.0	1.0
89	1.0	1.0	1.0
90	1.0	1.0	1.0
91	1.0	1.0	1.0
92	1.0	1.0	1.0
93	1.0	1.0	1.0
94	1.0	1.0	1.0
95	1.0	1.0	1.0
96	1.0	1.0	1.0
97	1.0		

[illegible]

KV-C298

KV-C298



NOTE:

The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

WAF040X00.6.4-2

2

SIRCS RECEIVE
INDICATOR

H3

[CONTROL SW]

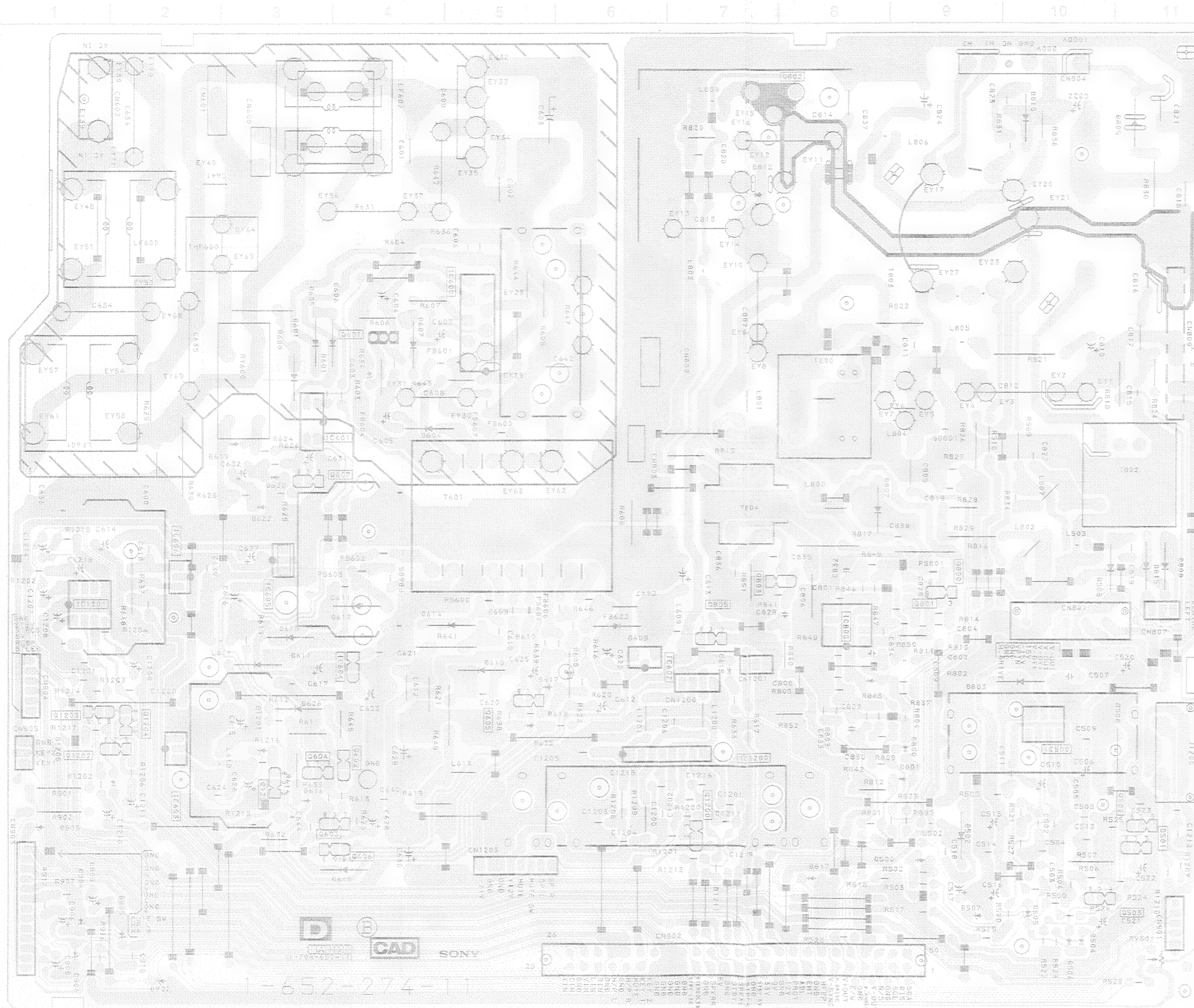
F1

[AC IN POWER SW]

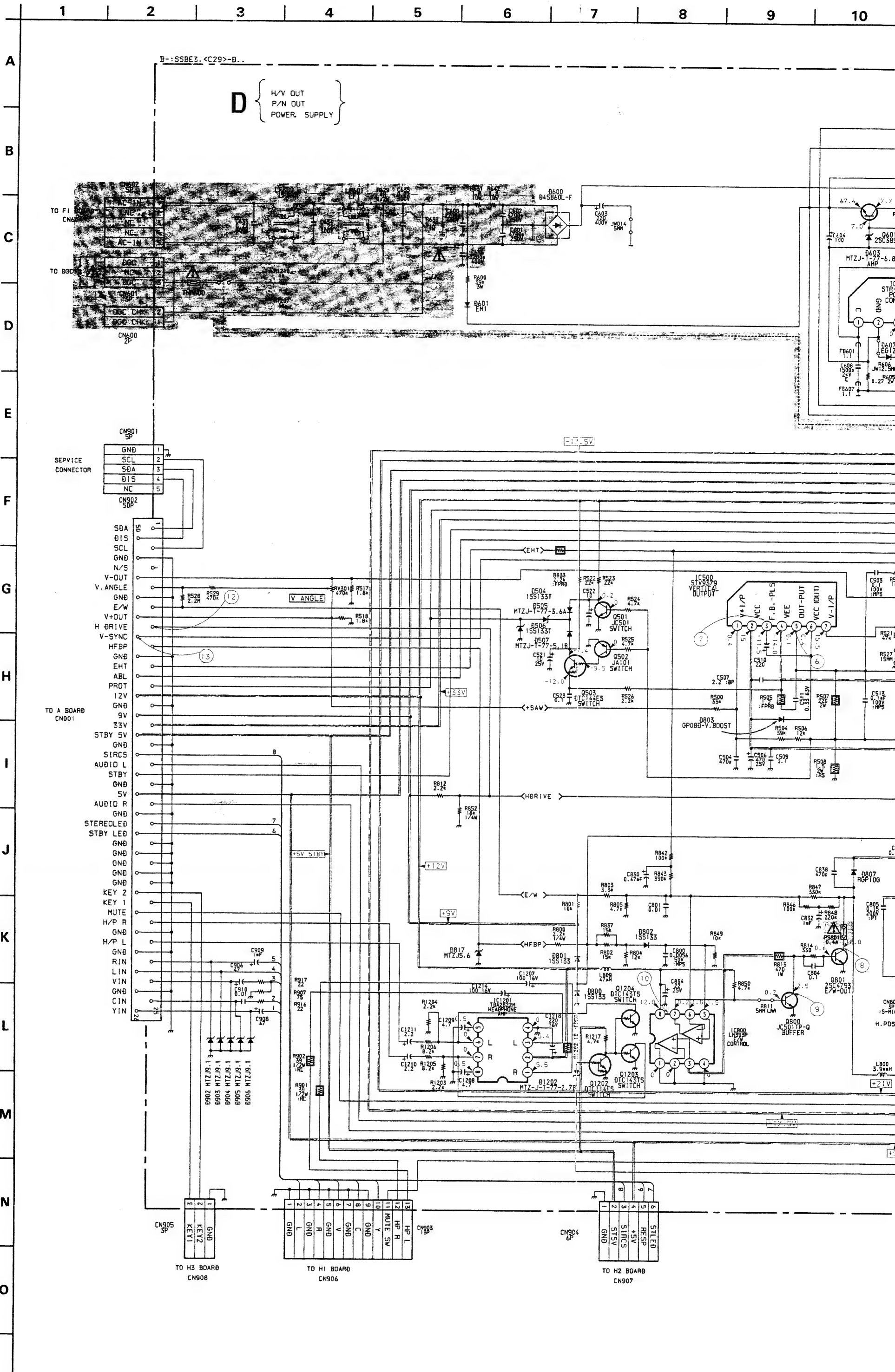
D

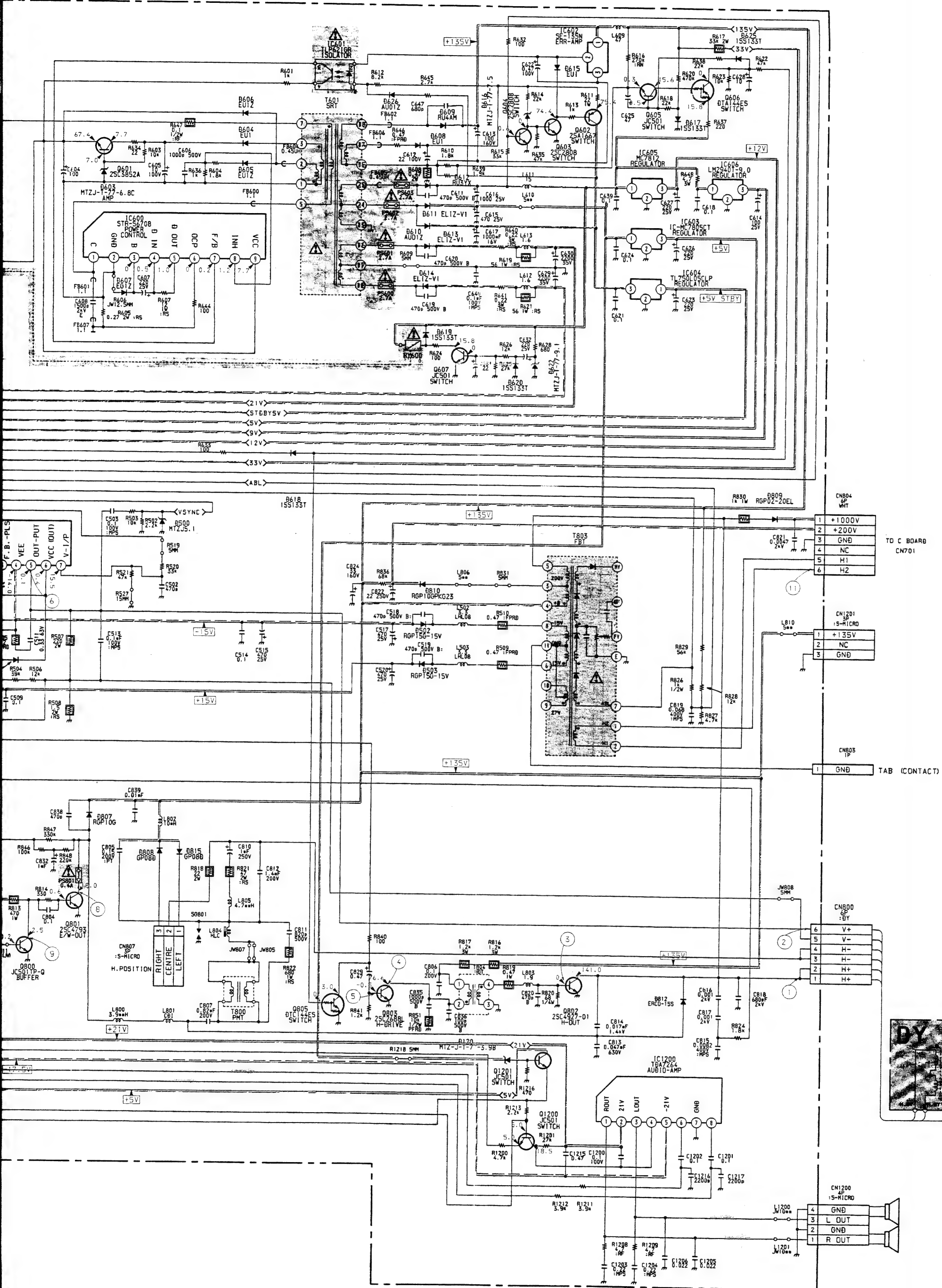
HV OUT
PIN OUT
POWER SUPPLY

- D BOARD -

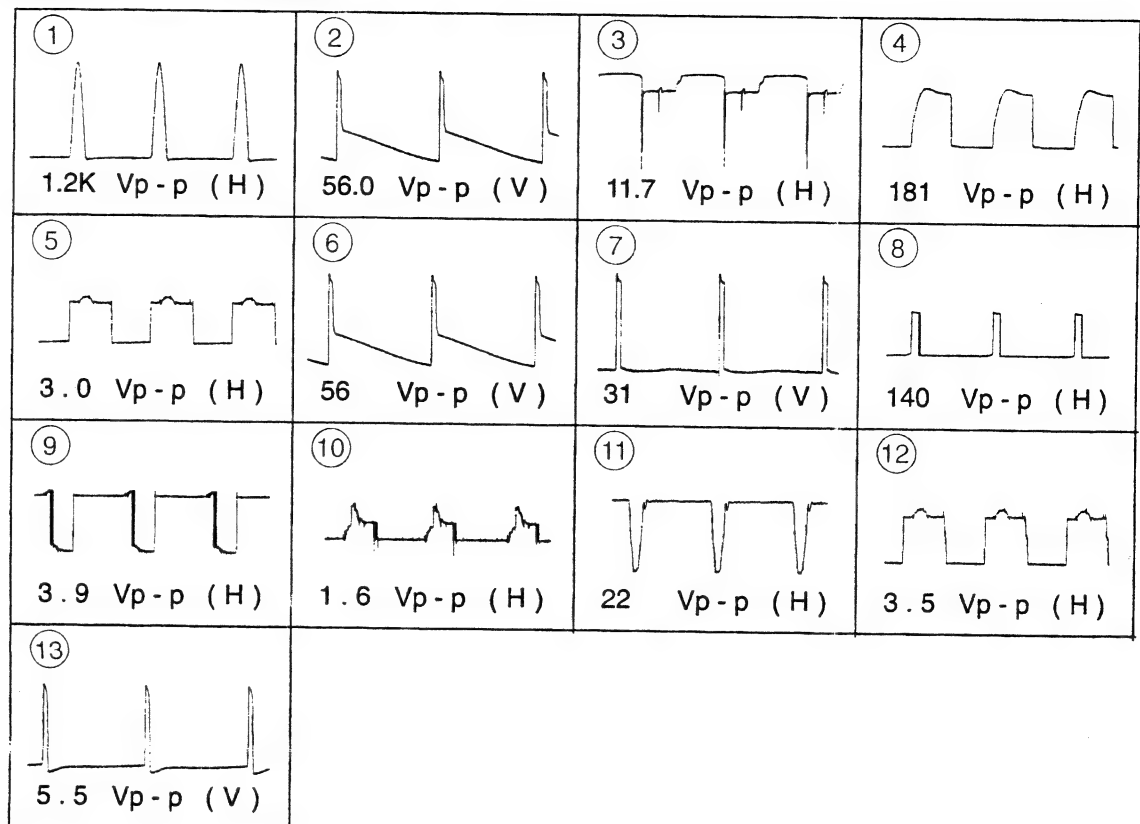


IC		D600	
IC500	G - 10	D601	C - 3
IC600	C - 5	D603	D - 4
IC601	D - 4	D604	D - 4
IC602	F - 7	D605	C - 3
IC603	H - 2	D606	C - 4
IC604	F - 4	D607	C - 4
IC605	F - 3	D608	F - 6
IC606	E - 2	D609	F - 6
IC800	F - 8	D610	F - 3
IC1200	G - 7	D611	F - 3
IC1201	F - 1	D612	F - 4
TRANSISTOR		D613	F - 5
Q501	H - 11	D614	F - 4
Q502	H - 11	D615	H - 4
Q503	I - 11	D616	G - 3
Q601	C - 4	D617	F - 5
Q602	G - 4	D618	F - 7
Q603	H - 3	D619	D - 2
Q604	G - 3	D620	E - 3
Q605	G - 5	D622	E - 3
Q606	H - 4	D625	G - 5
Q607	E - 4	D626	G - 3
Q800	E - 9	D800	G - 9
Q801	F - 9	D801	G - 9
Q802	A - 8	D802	F - 9
Q803	F - 7	D803	F - 9
Q805	F - 7	D807	E - 9
Q1200	H - 7	D808	E - 11
DIODE		D809	A - 11
D500	G - 9	D810	A - 10
D502	G - 9	D812	B - 7
D503	F - 10	D815	E - 11
D504	I - 10	D817	H - 8
D505	I - 10	D902	I - 2
D506	I - 10	D903	H - 1
D507	G - 9	D904	H - 1
		D905	H - 2
		D906	I - 1

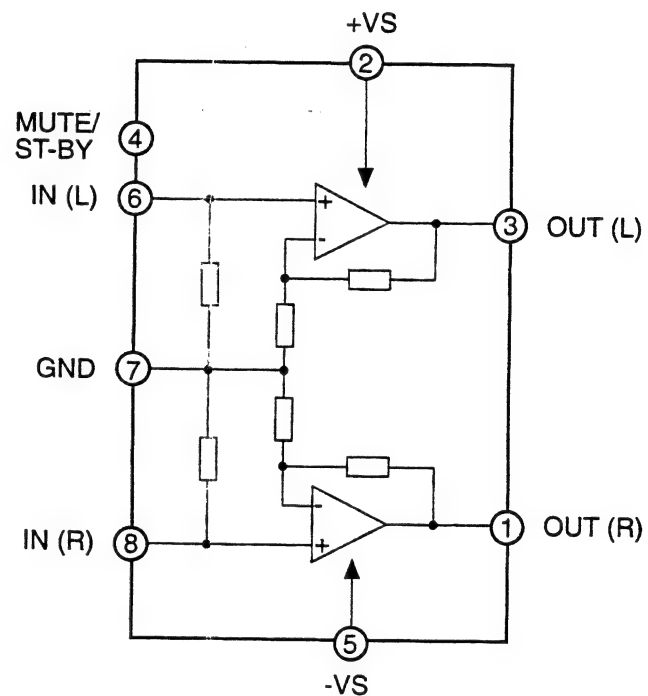




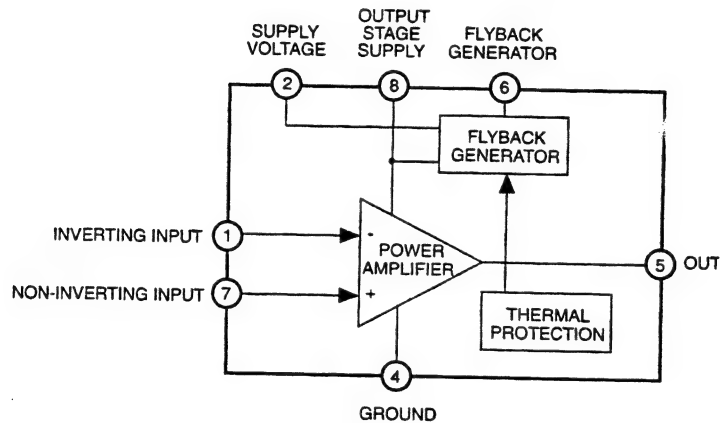
WAVEFORMS D BOARD



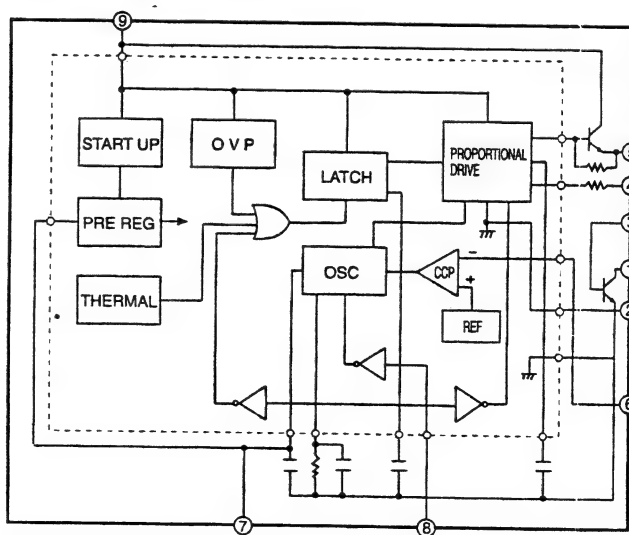
D BOARD IC1200 TDA7264



D BOARD IC500 STV9379



D BOARD IC600 STR-S6708



CN804

4P

WHT

1000V

200V

GND

NC

H1

H2

TO C BOARD
CN701

CN1201

5P

S-MICRO

135V

NC

GND

CN803

1P

GND

TAB (CONTACT)

CN800

6P

S-BY

V+

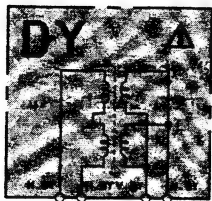
V-

H-

H-

H+

H+



CN1200

4P

S-MICRO

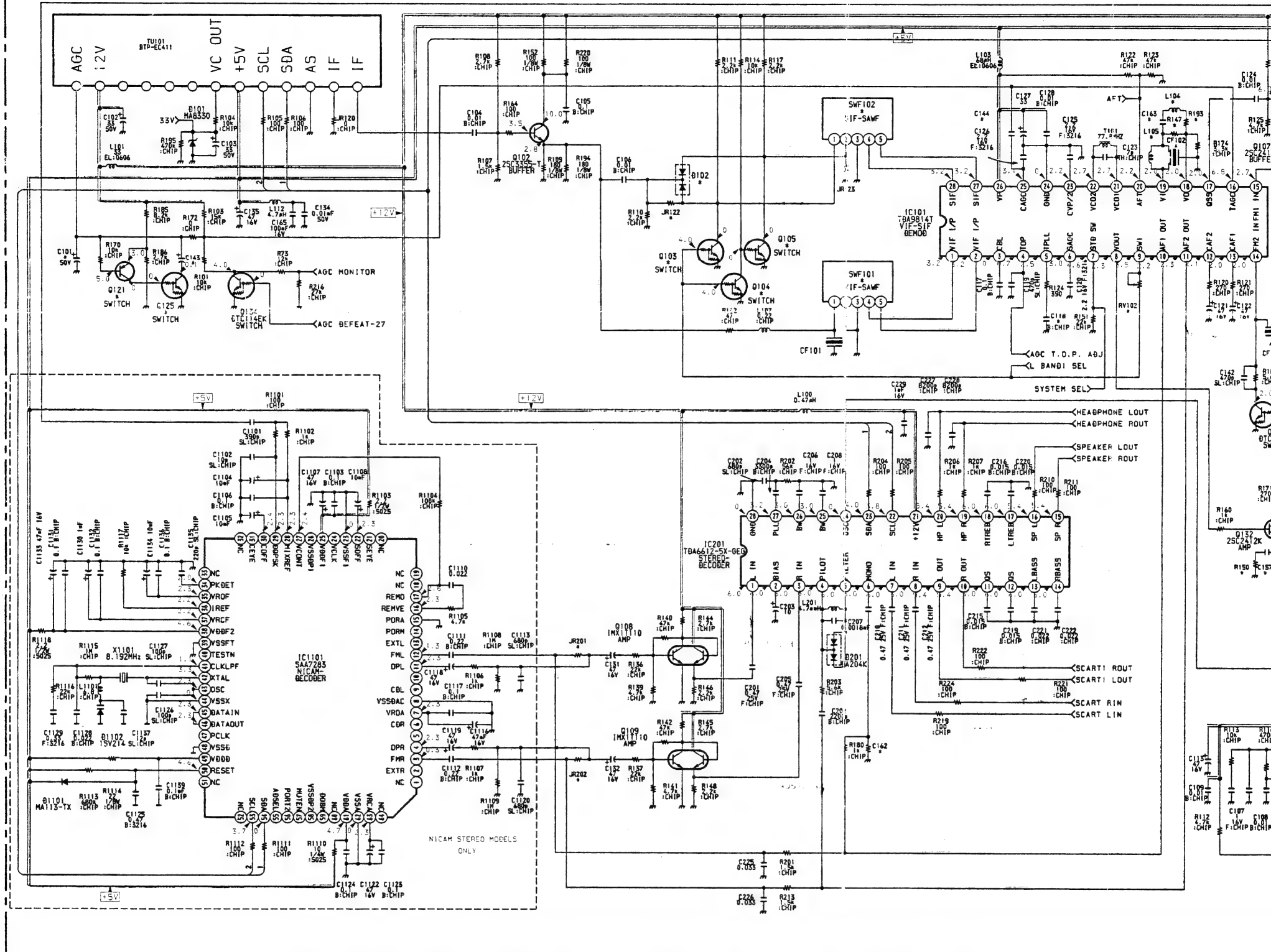
GND

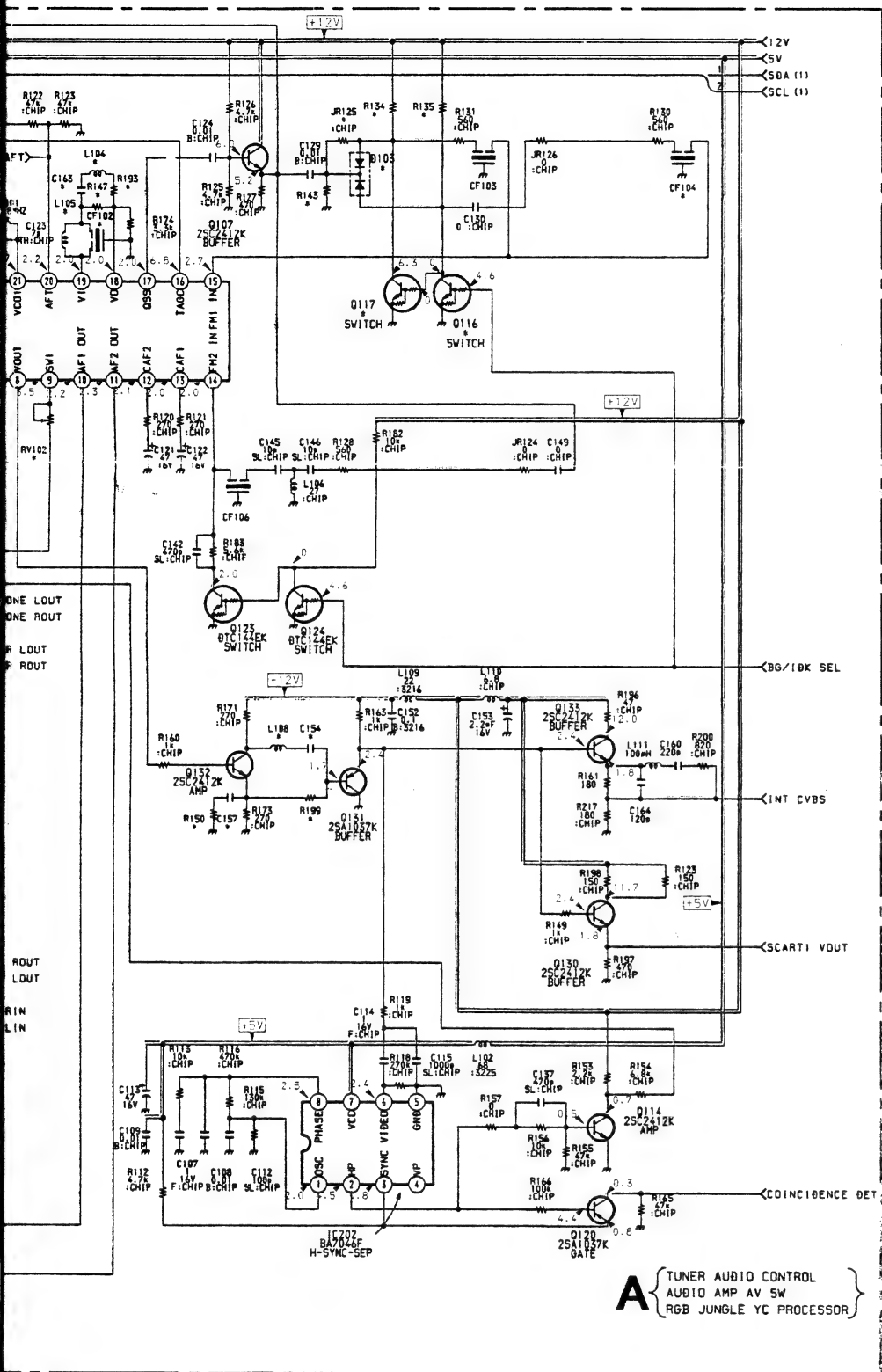
OUT

GND

OUT

B-SSBE3B<C...>-A...

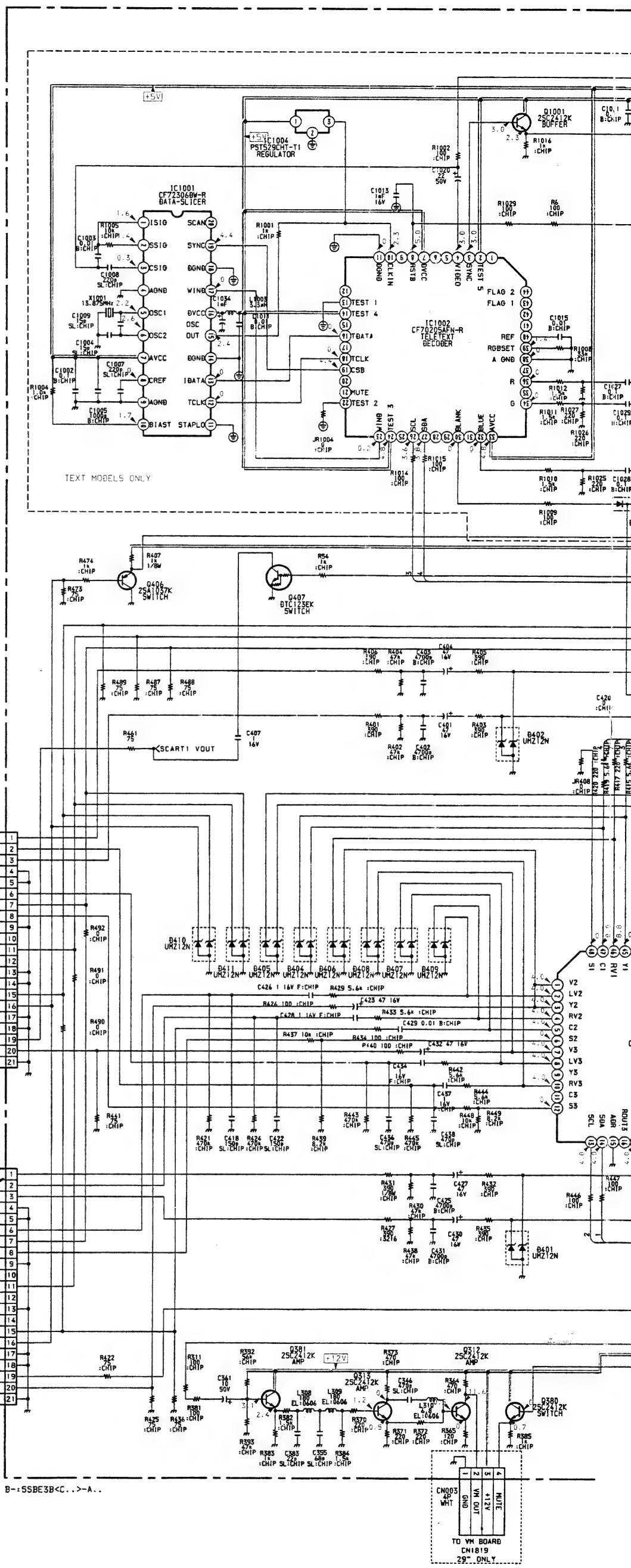


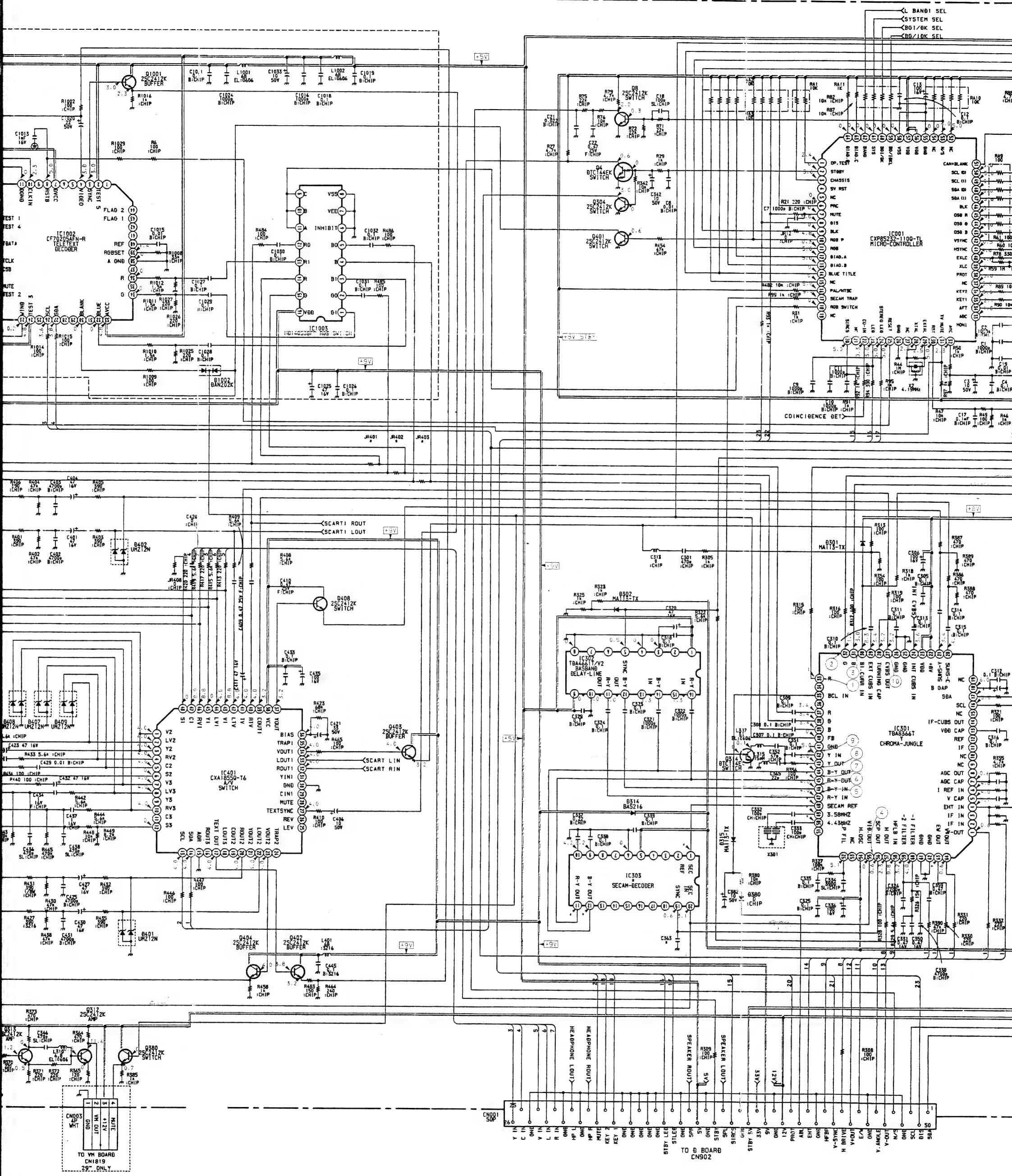


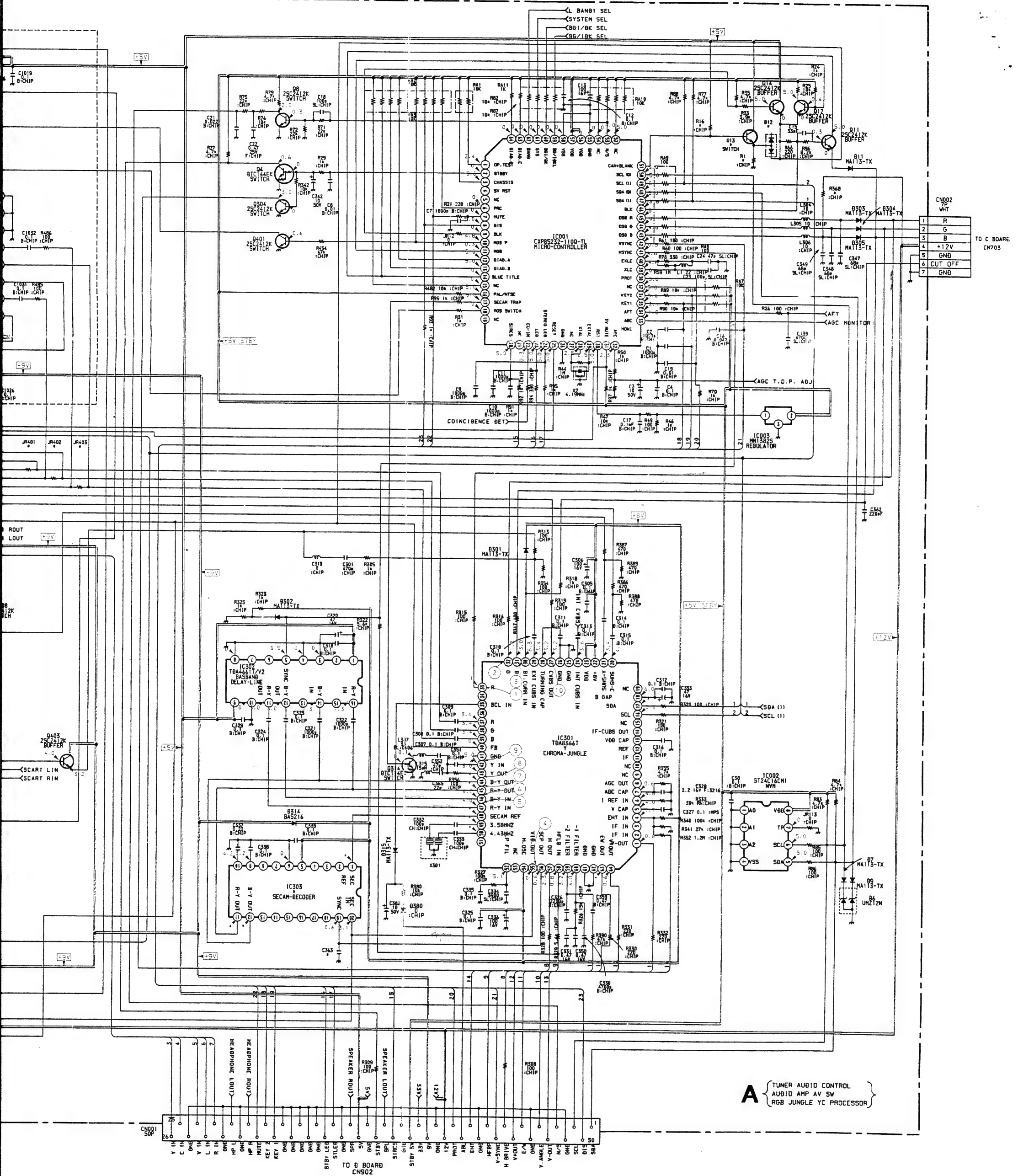
Voltages indicated with the mark ※ on the schematic diagram are shown in the table below.

A BOARD

IC	Pin	PAL	SECAM	NTSC 3.58	NTSC 4.43
IC301	17	4.0	4.0	4.0	0
	36	3.6	2.5	3.5	3.5
	44	1.5	3.1	1.5	1.5
	45	1.5	3.0	1.5	1.5
	48	1.7	4.4	1.6	1.7
	49	1.4	1.4	2.0	1.4
	50	2.0	2.0	1.4	2.0
	63	3.4	2.5	2.2	2.5
IC303	1	1.7	4.4	1.6	1.7
	11	1.5	3.0	1.5	1.5
	12	1.5	3.1	1.5	1.5





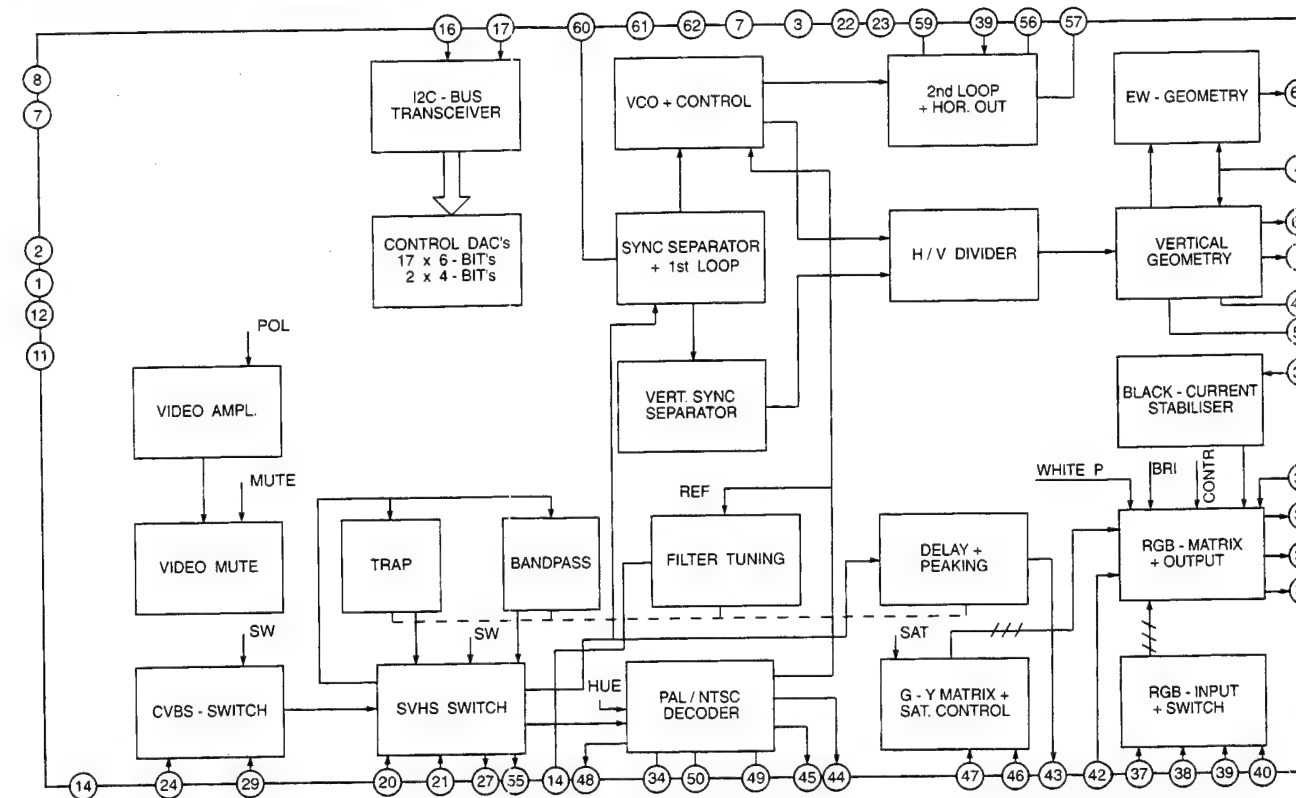


A { TUNER AUDIO CONTROL
AUDIO AMP AV SW
RGB JUNGLE YC PROCESSOR }

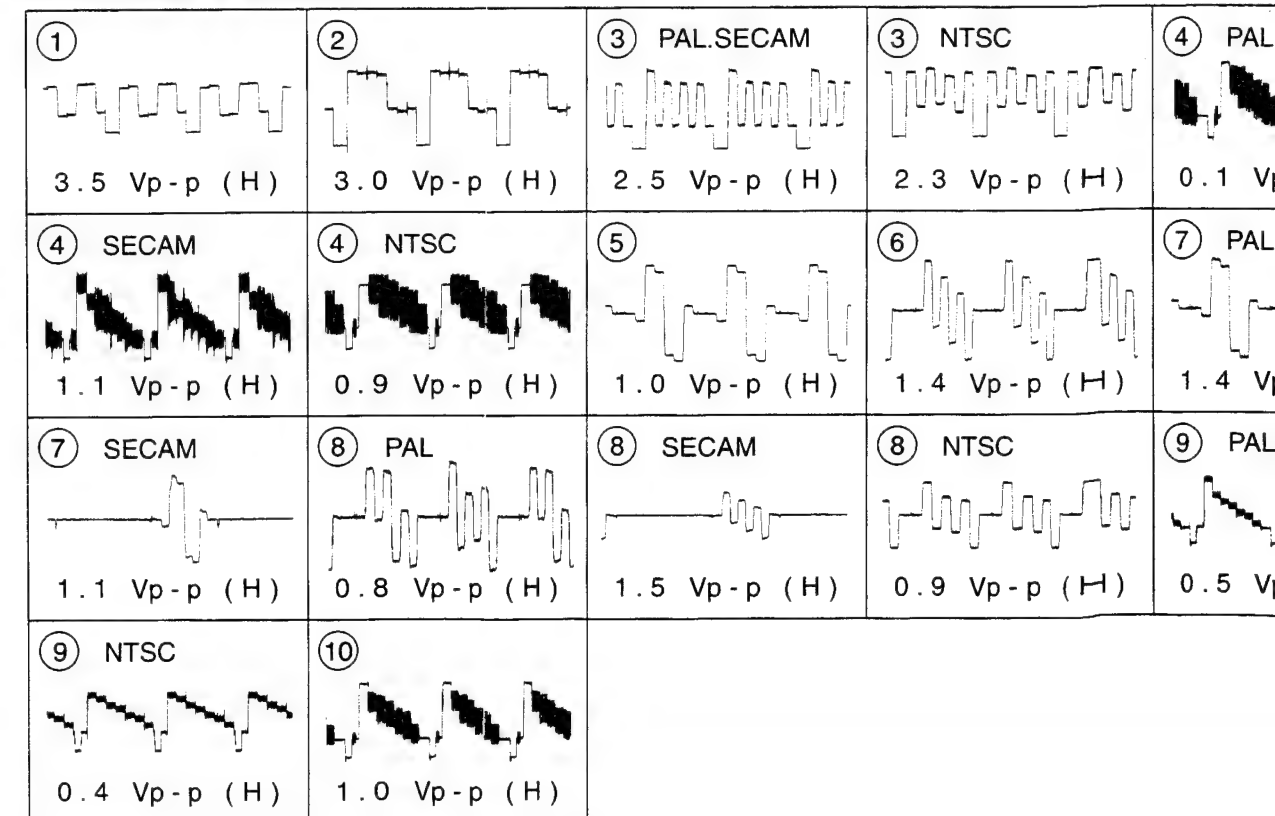
A BOARD * MARK

Model	C2981A	C2980B	C2981D	C2983E
C101	22MF	4.7MF	22MF	22MF
C118	0.1MF	0.22MF	0.22MF	0.1MF
C143	-	1MF	-	-
C144	-	100MF	-	-
C154	180PF	33PF	180PF	180PF
C157	-	68PF	-	-
C162	-	0.012MF	-	-
C163	-	0.001MF	-	-
C363	-	22PF	22PF	-
CF104	-	6.0 MHz	6.5MHz	-
D12	-	MA715-TX	-	-
D102	-	DAN202K	-	-
D103	-	DAN202K	DAN202K	-
IC303	-	TDA8395T	TDA8395T	-
JR122	0	-	0	0
JR123	0	-	0	0
JR125	0	-	-	0
JR201	0	-	0	-
JR202	0	-	0	-
JR401	-	0	-	-
JR402	-	0	-	-
JR403	-	0	-	-
L104	-	100UH	-	-
L105	15UH	5.5UH	15UH	15UH
L108	8.2UH	27UH	8.2UH	8.2UH
Q13	-	2SC2412K	-	-
Q103	-	DTC114EK	-	-
Q104	-	DTC114EK	-	-
Q105	-	DTC114EK	-	-
Q116	-	DTC114EK	DTC114EK	-
Q117	-	DTC114EK	DTC114EK	-
Q121	-	2SA1162-G	-	-
Q125	-	DTC114EK	-	-
R1	-	1K	-	-
R16	-	1K	-	-
R134	-	2.2K	2.2K	-
R135	-	2.2K	2.2K	-
R143	-	2.2K	2.2K	-
R147	220	180	220	220
R150	-	0	-	-
R193	-	1K	-	-
R199	390	1.2K	390	390
R368	6.8K	-	6.8K	6.8K
RV102	-	22K	-	-
SWF102	1-760-329-11	1-760-244-21	1-760-329-11	1-760-329-11

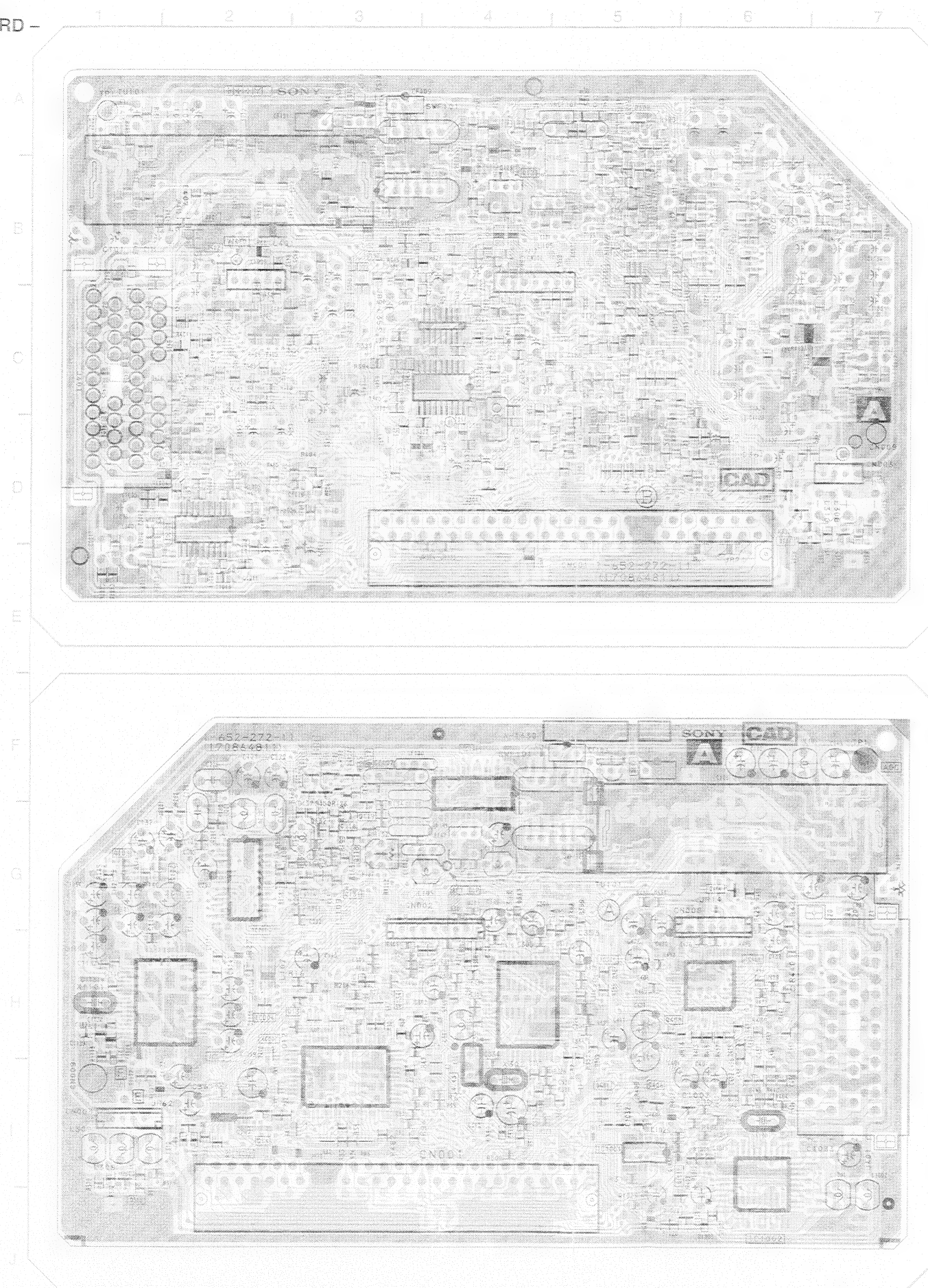
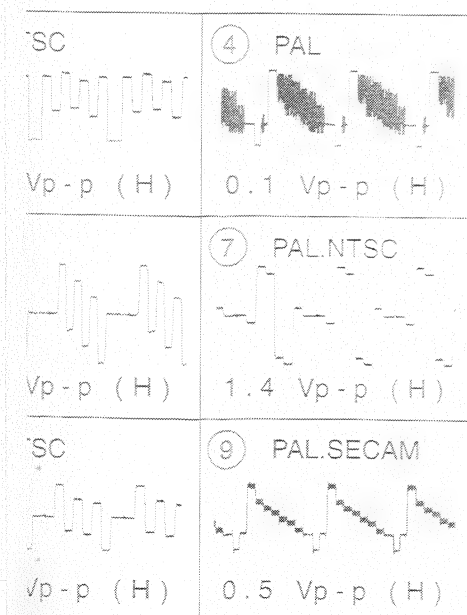
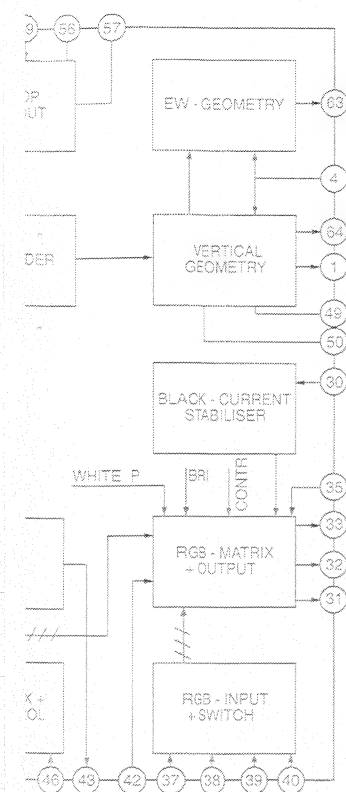
A BOARD IC301 TDA8366T



WAVEFORMS A BOARD



- A BOARD -



IC		Q313	J-1
IC001	H-2	Q314	C-4
IC002	I-2	Q380	D-6
IC101	F-4	Q381	D-6
IC201	G-2	Q401	I-5
IC202	B-5	Q402	B-2
IC301	H-5	Q403	B-3
IC302	C-4	Q404	G-6
IC303	C-4	Q1001	I-6
IC401	H-6	Q1003	J-5
IC1001	D-2	DIODE	
IC1002	J-6	D6	I-2
IC1003	I-5	D7	I-2
IC1101	H-2	D9	I-2
TRANSISTOR		D11	D-5
Q4	D-6	D101	B-2
Q8	C-5	D102	B-4
Q11	D-5	D103	A-5
Q12	C-5	D201	B-6
Q14	I-2	D301	G-4
Q102	F-5, A-3	D302	C-4
Q103	B-3	D303	H-3
Q104	B-3	D304	B-5
Q105	B-3	D305	C-4
Q107	B-5	D314	B-3
Q108	G-2	D380	I-4
Q109	G-1	D401	C-2
Q114	G-3	D402	C-2
Q116	G-3	D404	C-2
Q117	F-3	D405	C-2
Q120	C-5	D406	C-2
Q121	A-1	D407	C-2
Q123	B-4	D408	C-2
Q124	F-3	D409	C-2
Q125	B-1	D410	C-2
Q130	B-3	D411	D-2
Q131	G-3	D1002	I-6
Q132	G-3	D1003	J-6
Q133	B-4	D1101	H-1
Q304	D-4	D1102	C-7
Q312	E-7		

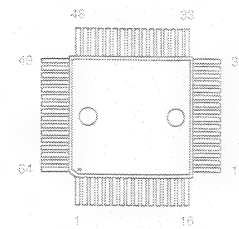
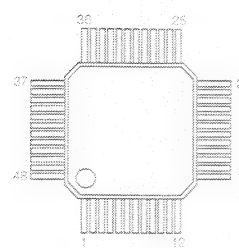
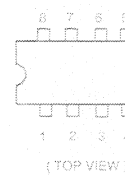
Note:

- Pattern from the side which enables seeing.
- Pattern of the rear side.

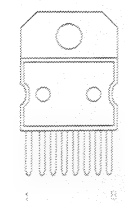
KV-C298

KV-C298

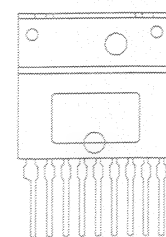
5.4 SEMICONDUCTORS

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CF70200FNCXA1855Q
SAA7283
CXP85232LM393
TDA7264

TDA7264



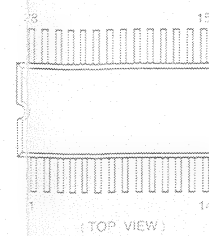
STRS6708



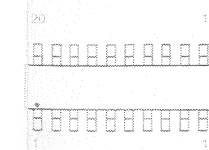
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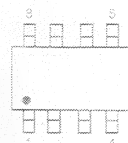
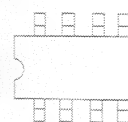
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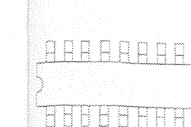
CF72306DW



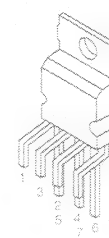
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BA7046
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MC7805CT
LM2940T
SE135N

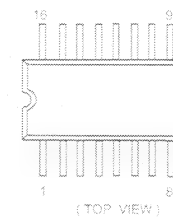
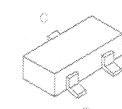
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2SA10910
2SC2551-0
JA101
JC501TP

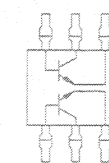
STV9379



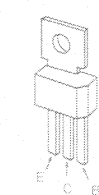
TDA4661/V2

DTC144EK
DTA144EK
2SC2412K
2SA1037-G

1MX1T110



BF871

2SA1837
2SC4793

2SD774-34



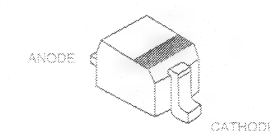
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TL750L05CLP



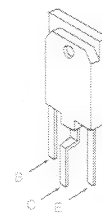
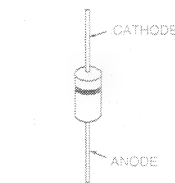
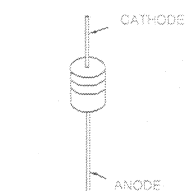
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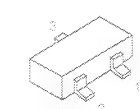
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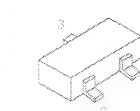
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RGP10GPKG23
RGP15GPKG23
GP08DPKG23
RU-4AM
EL1Z
EU-1-V1
EU-1ZV1MTZJ-9.1C
MTZJ-5.1B
MTZJ-9.1
MTZJ-3.6A
MTZJ-6.8C
MTZJ-39C
1SS133

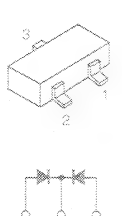
MA704WK



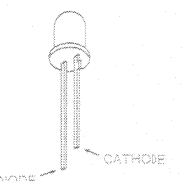
DA204K



UMZ12N

MA8039
MA113

SLR-54VR3

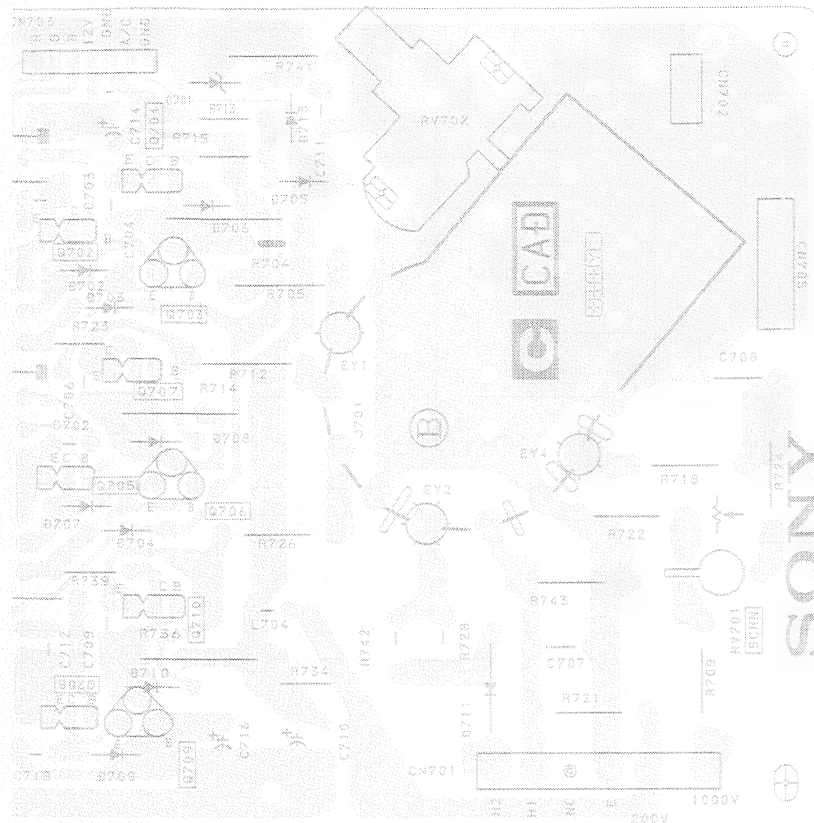


VM

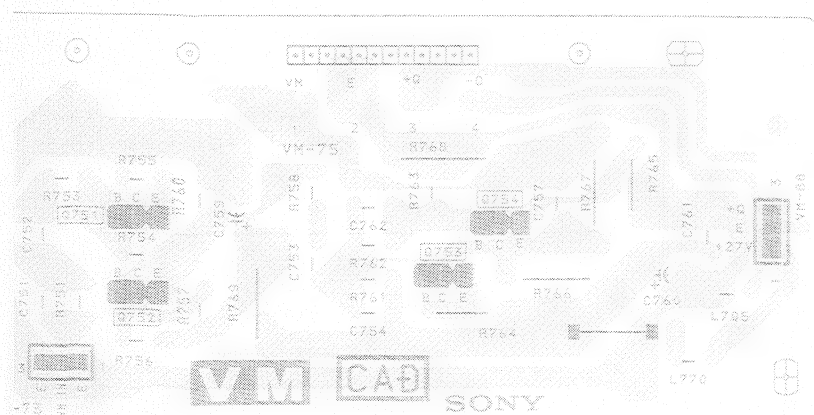
[VM AMP]

RGB OUT]

RD -



ARD -



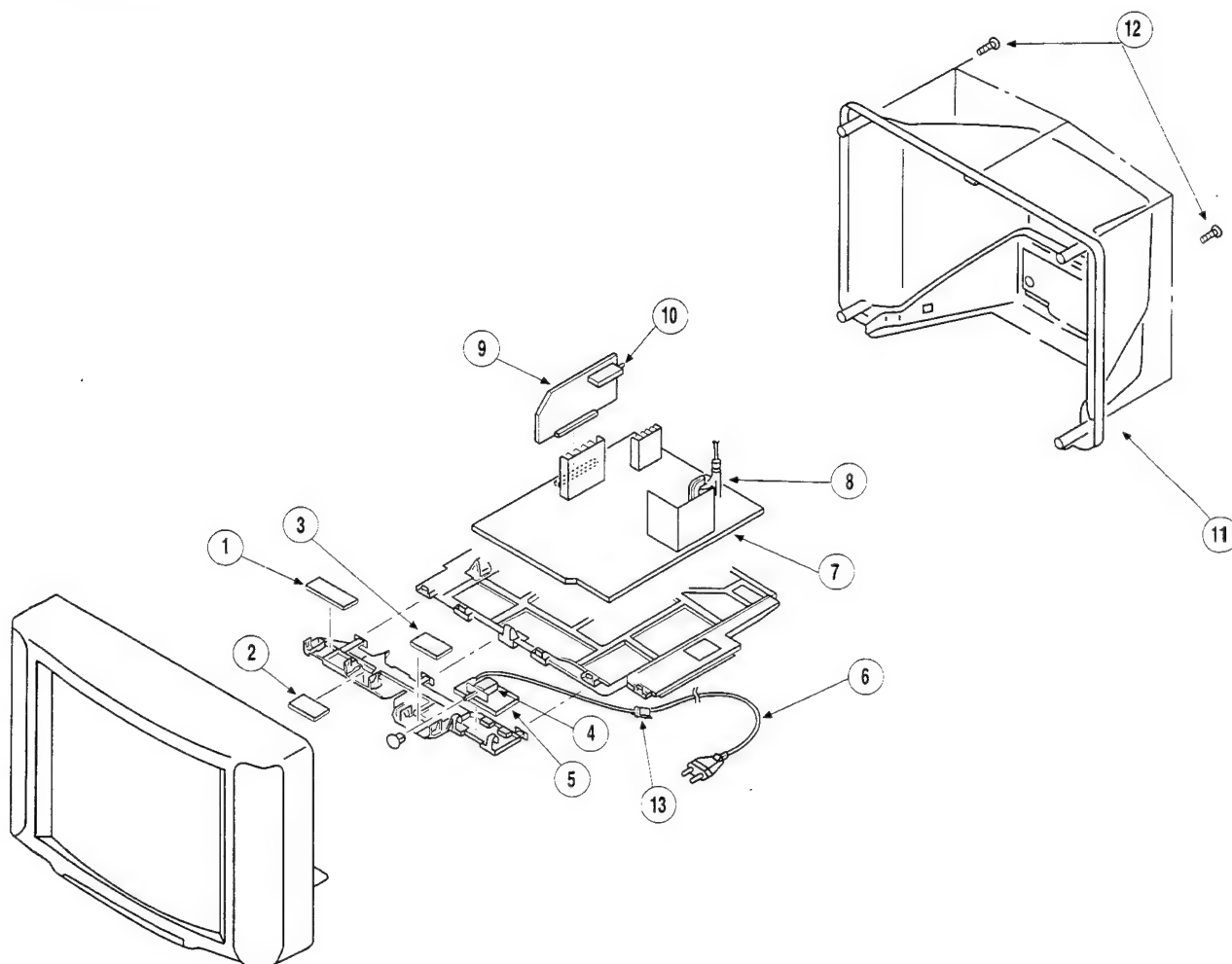
SECTION 6

EXPLODED VIEWS

NOTE :

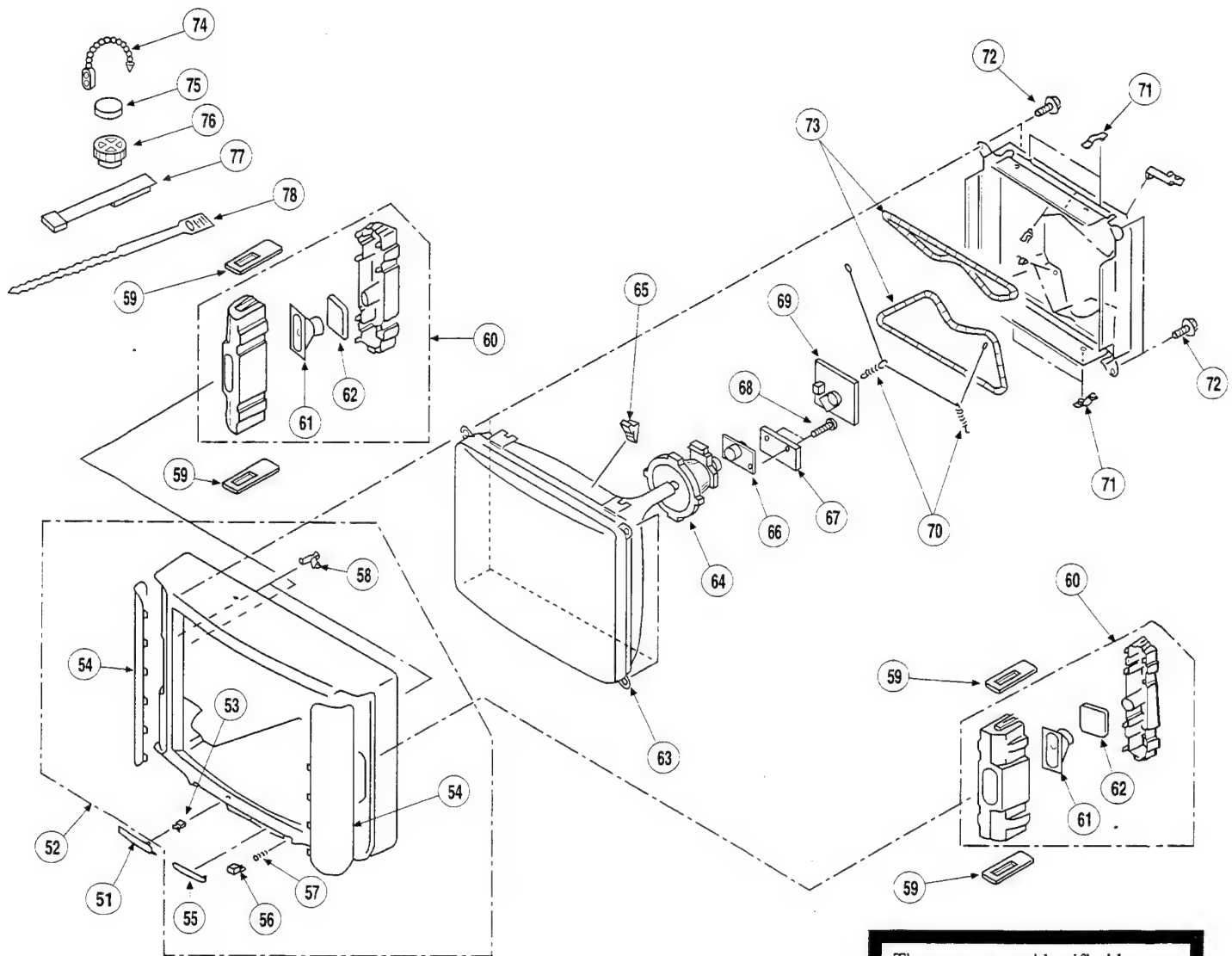
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and marked . ! are critical for safety.
Replace only with the part number specified.

6-1. CHASSIS

REF NO	PART NO	DESCRIPTION	REMARK	REF NO	PART NO	DESCRIPTION	REMARK
1	*1-652-275-11	H1 BOARD		7	*A-1642-125-A	D BOARD, COMPLETE	
2	*1-652-270-11	H3 BOARD		8	! 1-453-169-11	TRANSFORMER ASSY, FLYBACK (UX-1604A2)	
3	*1-652-269-11	H2 BOARD		9	*A-1632-224-A	A BOARD, COMPLETE (KV-C2981A)	
4	! 1-571-433-11	SWITCH, PUSH (AC POWER)			*A-1632-213-A	A BOARD, COMPLETE (KV-C2980B)	
5	*1-652-271-12	F1 BOARD			*A-1632-216-A	A BOARD, COMPLETE (KV-C2981D)	
6	! 1-751-680-11	CORD, POWER (WITH NOISE FILTER)			*A-1632-232-A	A BOARD, COMPLETE (KV-C2983E)	
		(KV-C2981A/C2981D)		10	8-598-045-01	TUNER (BTP-EC411)	
	! 1-590-460-11	CORD, POWER (WITH CONNECTOR)		11	4-202-769-01	COVER, REAR	
		(KV-C2980B/C2983E)		12	4-039-358-01	SCREW +BVTP 4X16	
				13	! 4-389-201-11	HOLDER, AC CORD	

6-2. PICTURE TUBE



The components identified by shading and marked ! are critical for safety.
Replace only with the part number specified.

REF NO	PART NO	DESCRIPTION	REMARK	REF NO	PART NO	DESCRIPTION	REMARK
51	4-200-990-51	DOOR		65	3-704-495-01	SPACER, DY	
52	X-4200-167-1	BEZNET ASSY	54-58	66	! 1-452-509-41	NECK ASSY, CRT (NA-308)	
53	4-392-036-01	CATCHER, PUSH		67	*A-1644-052-A	VM BOARD, COMPLETE	
54	X-4200-099-1	PLATE ASSY, ORNAMENTAL		68	4-039-357-01	SCREW (3X8), (+) BV TAPPING	
55	4-202-774-01	WINDOW, ORNAMENTAL		69	*A-1638-053-A	C BOARD, COMPLETE	
56	4-200-991-11	BUTTON, POWER		70	4-369-318-51	SPRING, TENSION	
57	4-392-112-41	SPRING		71	4-034-296-01	HOLDER, DGC	
58	4-200-992-01	CLIP, CONTACT		72	4-036-188-01	SCREW (M), PT	
59	4-202-307-02	CUSHION, BOX		73	! 1-402-747-21	COIL, DEGAUSSING	
60	A-1678-048-A	BOX ASSY		74	4-308-870-00	CLIP, LEAD WIRE	
61	1-504-146-11	SPEAKER (5X11CM)		75	1-452-032-00	MAGNET, DISK; 10MMØ	
62	4-200-999-01	STOPPER		76	1-452-094-00	MAGNET, ROTATABLE DISK; 15MMØ	
63	! 8-733-831-05	PICTURE TUBE SD-191 (A68JYL61X)		77	X-4387-214-1	PERMALLOY ASSY, CORRECTION	
64	! 8-451-313-61	DEFLECTION YOKE (Y29FXA)		78	3-701-007-00	BAND BINDING	

ELECTRICAL PARTS LIST

SECTION 7

The components identified by shading and marked Δ are critical for safety. Replace only with the part number specified.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

When indicating parts by reference number, please include the board name.

CAPACITORS

COILS

MF : mF, PF : mmF

MMH : mH, μ H : mH

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS

- All resistors are in ohms
- F : nonflammable

F1

A

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
	*1-652-271-11	F1 BOARD *****		C23	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
		< CONNECTOR >		C24	1-163-109-00	CERAMIC CHIP 47PF	5% 50V
CN603 Δ	*1-580-844-11	PIN, CONNECTOR (POWER)		C30	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
CN604 Δ	*1-695-292-11	PIN, CONNECTOR (POWER)		C101	1-124-916-11	ELECT 22MF	20% 50V
		< FUSE >			1-124-927-11	ELECT 4.7MF	20% 50V
F601 Δ	1-576-232-21	FUSE (H.B.C.) 5A/250V				(KV-C2981A/C2981B/C2983E)	
	1-533-230-11	HOLDER, FUSE (F601)				(KV-C2980B)	
	4-201-057-01	COVER, FUSE (F601)		C102	1-124-917-11	ELECT 33MF	20% 50V
		< SWITCH >		C103	1-124-917-11	ELECT 33MF	20% 50V
S601 Δ	1-571-433-11	SWITCH, PUSH (AC POWER)		C104	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
*****				C105	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
	*A-1632-224-A	A BOARD, COMPLETE (KV-C2981A)		C106	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
	*A-1632-213-A	A BOARD, COMPLETE (KV-C2980B)		C107	1-164-346-11	CERAMIC CHIP 1MF	16V
	*A-1632-216-A	A BOARD, COMPLETE (KV-C2981D)		C108	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
	*A-1632-232-A	A BOARD, COMPLETE (KV-C2983E)		C109	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
		*****		C112	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
				C113	1-124-477-11	ELECT 47MF	20% 16V
				C114	1-164-346-11	CERAMIC CHIP 1MF	16V
				C115	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
				C117	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
				C118	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
					1-164-489-11	CERAMIC CHIP 0.22MF	10% 16V
						(KV-C2980B/C2981D)	
TP1	1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P		C119	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
		< CAPACITOR >		C120	1-164-337-11	CERAMIC CHIP 2.2MF	16V
C1	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	C121	1-124-477-11	ELECT 47MF	20% 16V
C2	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	C122	1-124-477-11	ELECT 47MF	20% 16V
C3	1-124-907-11	ELECT 10MF	20% 50V	C123	1-163-090-00	CERAMIC CHIP 7PF	0.15PF 50V
C4	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C124	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C7	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	C125	1-164-337-11	CERAMIC CHIP 2.2MF	16V
C8	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C126	1-164-337-11	CERAMIC CHIP 2.2MF	16V
C9	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	C127	1-124-917-11	ELECT 33MF	20% 50V
C10	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	C128	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C11	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	C129	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C12	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C130	1-216-295-91	METAL GLAZE 0	5% 110W
C13	1-126-101-11	ELECT 100MF	20% 16V	C131	1-124-477-11	ELECT 47MF	20% 16V
C15	1-163-105-00	CERAMIC CHIP 33PF	5% 50V	C132	1-124-477-11	ELECT 47MF	20% 16V
C16	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V	C134	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C17	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C135	1-124-477-11	ELECT 47MF	20% 16V
C18	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	C137	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C19	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C139	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C21	1-163-037-11	CERAMIC CHIP 0.022MF	10% 25V	C142	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C22	1-164-005-11	CERAMIC CHIP 0.47MF	25V	C143	1-126-101-11	ELECT 100MF	20% 16V
						(KV-C2980B)	

A

REF.NO.	PART NO.	DESCRIPTION	REMARK
C144	1-162-638-11	CERAMIC CHIP 1MF	16V (KV-C2980B)
C145	1-163-093-00	CERAMIC CHIP 10PF	5% 50V
C146	1-163-093-00	CERAMIC CHIP 10PF	5% 50V
C149	1-216-295-91	METAL GLAZE 0	5% 1/10W
C152	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C153	1-164-337-11	CERAMIC CHIP 2.2MF	16V
C154	1-163-123-00	CERAMIC CHIP 180PF	5% 50V (KV-C2981A/C2981D/C2983E)
	1-163-105-00	CERAMIC CHIP 33PF	5% 50V (KV-C2980B)
C157	1-163-113-00	CERAMIC CHIP 68PF	5% 50V (KV-C2980B)
C160	1-163-125-00	CERAMIC CHIP 220PF	5% 50V
C162	1-163-022-00	CERAMIC CHIP 0.012MF	10% 50V (KV-C2980B)
C163	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V (KV-C2980B)
C164	1-163-119-00	CERAMIC CHIP 120PF	5% 50V
C165	1-126-101-11	ELECT 100MF	20% 16V
C201	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C202	1-163-137-00	CERAMIC CHIP 680PF	5% 50V
C203	1-124-907-11	ELECT 10MF	20% 50V
C204	1-164-182-11	CERAMIC CHIP 0.0033MF	10% 50V
C205	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C206	1-164-346-11	CERAMIC CHIP 1MF	16V
C207	1-137-613-11	FILM 0.0018MF	2% 100V
C208	1-164-346-11	CERAMIC CHIP 1MF	16V
C209	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V
C210	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C211	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C212	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C215	1-163-023-00	CERAMIC CHIP 0.015MF	10% 50V
C216	1-163-011-11	CERAMIC CHIP 0.0015MF	10% 50V
C219	1-163-023-00	CERAMIC CHIP 0.015MF	10% 50V
C220	1-163-011-11	CERAMIC CHIP 0.0015MF	10% 50V
C221	1-163-037-11	CERAMIC CHIP 0.022MF	10% 25V
C222	1-163-037-11	CERAMIC CHIP 0.022MF	10% 25V
C225	1-130-489-00	FILM 0.033MF	5% 50V
C226	1-130-489-00	FILM 0.033MF	5% 50V
C227	1-163-020-00	CERAMIC CHIP 0.0082MF	10% 50V
C228	1-163-020-00	CERAMIC CHIP 0.0082MF	10% 50V
C229	1-164-346-11	CERAMIC CHIP 1MF	16V
C301	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C305	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C306	1-126-101-11	ELECT 100MF	20% 16V
C307	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C308	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C309	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C310	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C311	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C312	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C313	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C314	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C315	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C316	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C318	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C320	1-124-477-11	ELECT 47MF	20% 16V
C321	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C322	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C323	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V

REF.NO.	PART NO.	DESCRIPTION	REMARK
C324	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C325	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C326	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V
C327	1-136-165-00	FILM 0.1MF	5% 50V
C328	1-164-337-11	CERAMIC CHIP 2.2MF	16V
C329	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C330	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C331	1-165-320-11	CERAMIC CHIP 0.47MF	10% 16V
C332	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C333	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C334	1-163-016-00	CERAMIC CHIP 0.0039MF	10% 50V
C335	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C336	1-126-101-11	ELECT 100MF	20% 16V
C337	1-164-489-11	CERAMIC CHIP 0.22MF	10% 16V
C338	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C339	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C342	1-124-907-11	ELECT 10MF	20% 50V
C346	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C347	1-163-113-00	CERAMIC CHIP 68PF	5% 50V
C348	1-163-113-00	CERAMIC CHIP 68PF	5% 50V
C349	1-163-113-00	CERAMIC CHIP 68PF	5% 50V
C350	1-165-320-11	CERAMIC CHIP 0.47MF	10% 16V
C351	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C352	1-163-109-00	CERAMIC CHIP 47PF	5% 50V
C353	1-124-477-11	ELECT 47MF	20% 16V
C355	1-163-113-00	CERAMIC CHIP 68PF	5% 50V
C359	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C361	1-124-907-11	ELECT 10MF	20% 50V
C362	1-163-125-00	CERAMIC CHIP 220PF	5% 50V
C363	1-163-101-00	CERAMIC CHIP 22PF	5% 50V (KV-C2980B/C2981D)
C365	1-163-101-00	CERAMIC CHIP 22PF	5% 50V
C382	1-124-907-11	ELECT 10MF	20% 50V
C383	1-163-101-00	CERAMIC CHIP 22PF	5% 50V
C401	1-124-477-11	ELECT 47MF	20% 16V
C402	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C403	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C404	1-124-477-11	ELECT 47MF	20% 16V
C406	1-124-907-11	ELECT 10MF	20% 50V
C407	1-164-346-11	CERAMIC CHIP 1MF	16V
C409	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C410	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C411	1-124-477-11	ELECT 47MF	20% 16V
C418	1-163-121-00	CERAMIC CHIP 150PF	5% 50V
C420	1-216-295-91	METAL GLAZE 0	5% 1/10W
C421	1-124-917-11	ELECT 33MF	20% 50V
C422	1-163-121-00	CERAMIC CHIP 150PF	5% 50V
C423	1-124-477-11	ELECT 47MF	20% 16V
C425	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C426	1-164-346-11	CERAMIC CHIP 1MF	16V
C427	1-124-477-11	ELECT 47MF	20% 16V
C428	1-164-346-11	CERAMIC CHIP 1MF	16V
C429	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C430	1-124-477-11	ELECT 47MF	20% 16V
C431	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C432	1-124-477-11	ELECT 47MF	20% 16V
C433	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C434	1-164-346-11	CERAMIC CHIP 1MF	16V
C435	1-126-101-11	ELECT 100MF	20% 16V
C436	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C437	1-164-346-11	CERAMIC CHIP 1MF	16V

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C438	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	C1130	1-124-903-11	ELECT 1MF	20% 50V
C445	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1131	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
	< C1002 - C1034 FITTED ON >			C1132	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
	< KV-C2981A/C2981D/C2983E >			C1133	1-124-477-11	ELECT 47MF	20% 16V
C1002	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1134	1-124-907-11	ELECT 10MF	20% 50V
C1003	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C1135	1-163-125-00	CERAMIC CHIP 220PF	5% 50V
C1004	1-163-097-00	CERAMIC CHIP 15PF	5% 50V	C1136	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1005	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	C1137	1-163-095-00	CERAMIC CHIP 12PF	5% 50V
C1007	1-163-125-00	CERAMIC CHIP 220PF	5% 50V	C1139	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1008	1-163-125-00	CERAMIC CHIP 220PF	5% 50V	< FILTER >			
C1009	1-163-097-00	CERAMIC CHIP 15PF	5% 50V	CF101	1-760-154-21	TRAP, CERAMIC	
C1011	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	CF102	1-404-134-00	TRAP, CERAMIC (5.5MHZ)	
C1013	1-164-346-11	CERAMIC CHIP 1MF	16V	CF103	1-760-106-21	FILTER, CERAMIC	
C1015	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	CF104	1-567-100-00	FILTER, CERAMIC (KV-C2980B/C2981D)	
C1016	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	CF106	1-760-107-21	FILTER, CERAMIC	
C1018	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	SWF101	1-579-273-11	FILTER, SURFACE WAVE	
C1019	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	SWF102	1-760-329-11	FILTER, SURFACE WAVE (KV-C2981A/C2981D/C2983E)	
C1020	1-124-916-11	ELECT 22MF	20% 50V		1-760-244-21	FILTER, SURFACE WAVE (KV-C2980B)	
C1021	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	< CONNECTOR >			
C1024	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	CN001	1-695-302-21	CONNECTOR, BOARD TO BOARD 50P	
C1025	1-124-477-11	ELECT 47MF	20% 16V	CN002	*1-568-882-51	PIN, CONNECTOR 7P	
C1026	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	< DIODE >			
C1027	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	D6	8-719-047-41	DIODE UMZ12N-T146	
C1028	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	D7	8-719-041-97	DIODE MA113-TX	
C1029	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	D9	8-719-041-97	DIODE MA113-TX	
C1030	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	D11	8-719-041-97	DIODE MA113-TX	
C1031	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	D12	8-719-049-64	DIODE MA715-TX (KV-C2980B)	
C1032	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	D101	8-719-018-13	DIODE MA8330-TX	
C1033	1-124-907-11	ELECT 10MF	20% 50V	D102	8-719-914-43	DIODE DAN202K (KV-C2980B)	
C1034	1-164-346-11	CERAMIC CHIP 1MF	16V	D103	8-719-914-43	DIODE DAN202K (KV-C2980B/C2981D)	
	< C1101 - C1139 FITTED ON >			D201	8-719-914-42	DIODE DA204K	
	< KV-C2980B/C2983E >			D301	8-719-041-97	DIODE MA113-TX	
C1101	1-163-131-00	CERAMIC CHIP 390PF	5% 50V	D302	8-719-041-97	DIODE MA113-TX	
C1102	1-163-093-00	CERAMIC CHIP 10PF	5% 50V	D303	8-719-041-97	DIODE MA113-TX	
C1103	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	D304	8-719-041-97	DIODE MA113-TX	
C1104	1-124-907-11	ELECT 10MF	20% 50V	D305	8-719-041-97	DIODE MA113-TX	
C1105	1-124-907-11	ELECT 10MF	20% 50V	D314	8-719-047-16	DIODE BAS216	
C1106	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	D315	8-719-041-97	DIODE MA113-TX	
C1107	1-124-477-11	ELECT 47MF	20% 16V	D380	1-216-295-91	METAL GLAZE 0 5% 1/10W	
C1108	1-124-907-11	ELECT 10MF	20% 50V	D401	8-719-047-41	DIODE UMZ12N-T146	
C1110	1-163-037-11	CERAMIC CHIP 0.022MF	10% 25V	D402	8-719-047-41	DIODE UMZ12N-T146	
C1111	1-164-489-11	CERAMIC CHIP 0.22MF	10% 16V	D404	8-719-047-41	DIODE UMZ12N-T146	
C1112	1-164-489-11	CERAMIC CHIP 0.22MF	10% 16V	D405	8-719-047-41	DIODE UMZ12N-T146	
C1113	1-163-137-00	CERAMIC CHIP 680PF	5% 50V	D406	8-719-047-41	DIODE UMZ12N-T146	
C1116	1-124-477-11	ELECT 47MF	20% 16V	D407	8-719-047-41	DIODE UMZ12N-T146	
C1117	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	D408	8-719-047-41	DIODE UMZ12N-T146	
C1118	1-124-477-11	ELECT 47MF	20% 16V	D409	8-719-047-41	DIODE UMZ12N-T146	
C1119	1-124-477-11	ELECT 47MF	20% 16V	D410	8-719-047-41	DIODE UMZ12N-T146	
C1120	1-163-137-00	CERAMIC CHIP 680PF	5% 50V	D411	8-719-047-41	DIODE UMZ12N-T146	
C1122	1-124-477-11	ELECT 47MF	20% 16V	D1002	8-719-914-43	DIODE DAN202K (KV-C2981A/C2981D/C2983E)	
C1123	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	D1101	8-719-041-97	DIODE MA113-TX (KV-C2980B/C2983E)	
C1124	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	D1102	8-719-820-71	DIODE 1SV214 (KV-C2980B/C2983E)	
C1125	1-165-320-11	CERAMIC CHIP 0.47MF	10% 16V				
C1126	1-163-117-00	CERAMIC CHIP 100PF	5% 50V				
C1127	1-163-117-00	CERAMIC CHIP 100PF	5% 50V				
C1128	1-163-037-11	CERAMIC CHIP 0.022MF	10% 25V				
C1129	1-162-568-11	CERAMIC CHIP 0.33MF	25V				

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
< IC >				T101	1-403-686-11	COIL	
IC001	8-752-854-74	IC CXP85232-110Q-TL		< TRANSISTOR >			
IC002	8-759-277-89	IC ST24C16CM1-TR/A		Q4	8-729-901-01	TRANSISTOR DTC144EK	
IC003	8-759-041-54	IC MN1382S		Q8	8-729-920-74	TRANSISTOR 2SC2412K-QR	
IC004	8-759-041-54	IC MN1382S		Q11	8-729-920-74	TRANSISTOR 2SC2412K-QR	
IC101	8-759-193-14	IC TDA9814T		Q12	8-729-920-74	TRANSISTOR 2SC2412K-QR	
IC201	8-759-252-14	IC TDA6612-5X-GEG		Q13	8-729-920-74	TRANSISTOR 2SC2412K-QR (KV-C2580B)	
IC202	8-759-514-57	IC BA7046F		Q14	8-729-920-74	TRANSISTOR 2SC2412K-QR	
IC301	8-759-251-57	IC TDA8366T		Q102	8-729-104-80	TRANSISTOR 2SC3355	
IC302	8-759-086-97	IC TDA4661T/V2		Q103	8-729-901-01	TRANSISTOR DTC144EK (KV-C2980B)	
IC303	8-759-251-56	IC TDA8395T (KV-C2980B/C2981D)		Q104	8-729-901-01	TRANSISTOR DTC144EK (KV-C2980B)	
IC401	8-752-069-53	IC CXA1855Q-T6		Q105	8-729-901-01	TRANSISTOR DTC144EK (KV-C2980B)	
IC1001	8-759-252-08	IC CF72306DW-R (KV-C2981A/C2981D/C2983E)		Q107	8-729-920-74	TRANSISTOR 2SC2412K-QR	
IC1002	8-759-275-29	IC CF70205AFN-R (KV-C2981A/C2981D/C2983E)		Q108	8-729-907-26	TRANSISTOR IMX1	
IC1003	8-759-300-71	IC HD14053BFP (KV-C2981A/C2981D/C2983E)		Q109	8-729-907-26	TRANSISTOR IMX1	
IC1004	8-759-991-19	IC PST529CMT-T1 (KV-C2981A/C2981D/C2983E)		Q114	8-729-920-74	TRANSISTOR 2SC2412K-QR	
IC1101	8-759-251-58	IC SAA7283T (KV-C2980B/C2983E)		Q116	8-729-901-01	TRANSISTOR DTC144EK (KV-C2980B/C2981D)	
< SOCKET >				Q117	8-729-901-01	TRANSISTOR DTC144EK (KV-C2980B/C2981D)	
J401	1-766-296-11	CONNECTOR, DUAL SCART		Q120	8-729-216-22	TRANSISTOR 2SA1162-G	
< COIL >				Q121	8-729-216-22	TRANSISTOR 2SA1162-G (KV-C2980B)	
JR25	1-412-006-31	INDUCTOR CHIP 10UH		Q123	8-729-901-01	TRANSISTOR DTC144EK	
JR26	1-412-006-31	INDUCTOR CHIP 10UH		Q124	8-729-901-01	TRANSISTOR DTC144EK	
JR29	1-412-006-31	INDUCTOR CHIP 10UH		Q125	8-729-901-01	TRANSISTOR DTC144EK (KV-C2980B)	
L1	1-412-010-41	INDUCTOR CHIP 22UH		Q130	8-729-920-74	TRANSISTOR 2SC2412K-QR	
L100	1-410-989-11	INDUCTOR CHIP 0.47UH		Q131	8-729-216-22	TRANSISTOR 2SA1162-G	
L101	1-408-609-41	INDUCTOR 33UH		Q132	8-729-920-74	TRANSISTOR 2SC2412K-QR	
L102	1-410-214-31	INDUCTOR CHIP 68UH		Q133	8-729-920-74	TRANSISTOR 2SC2412K-QR	
L103	1-408-419-00	INDUCTOR 68UH		Q134	8-729-900-53	TRANSISTOR DTC114EK	
L104	1-414-170-11	INDUCTOR CHIP 100UH (KV-C2980B)		Q304	8-729-920-74	TRANSISTOR 2SC2412K-QR	
L105	1-408-411-00	INDUCTOR 15UH (KV-C2981A/C2981D/C2983E)		Q312	8-729-920-74	TRANSISTOR 2SC2412K-QR	
L106	1-408-406-00	INDUCTOR 5.6UH (KV-C2980B)		Q313	8-729-920-74	TRANSISTOR 2SC2412K-QR	
L107	1-410-985-11	INDUCTOR CHIP 0.22UH		Q314	8-729-900-53	TRANSISTOR DTC114EK	
L108	1-408-408-00	INDUCTOR 8.2UH (KV-C2981A/C2981D/C2983E)		Q380	8-729-920-74	TRANSISTOR 2SC2412K-QR	
L109	1-408-414-00	INDUCTOR 27UH (KV-C2980B)		Q381	8-729-920-74	TRANSISTOR 2SC2412K-QR	
L110	1-412-010-41	INDUCTOR CHIP 22UH		Q401	8-729-920-74	TRANSISTOR 2SC2412K-QR	
L111	1-412-004-31	INDUCTOR CHIP 6.8UH		Q402	8-729-920-74	TRANSISTOR 2SC2412K-QR	
L112	1-414-170-11	INDUCTOR CHIP 100UH		Q403	8-729-920-74	TRANSISTOR 2SC2412K-QR	
L113	1-410-200-31	INDUCTOR CHIP 4.7UH		Q404	8-729-920-74	TRANSISTOR 2SC2412K-QR	
L201	1-410-067-21	INDUCTOR 4.7MMH		Q406	8-729-216-22	TRANSISTOR 2SA1162-G	
L307	1-408-609-41	INDUCTOR 33UH		Q407	8-729-900-53	TRANSISTOR DTC114EK	
L308	1-408-424-00	INDUCTOR 180UH		Q408	8-729-920-74	TRANSISTOR 2SC2412K-QR	
L309	1-408-424-00	INDUCTOR 180UH		Q1001	8-729-920-74	TRANSISTOR 2SC2412K-QR (KV-C2981A/C2981D/C2983E)	
L310	1-408-407-00	INDUCTOR 6.8UH		< RESISTOR >			
L313	1-216-295-91	METAL GLAZE 0 5% 1/10W		JR3	1-216-295-91	METAL GLAZE 0 5% 1/10W	
L315	1-412-008-11	INDUCTOR CHIP 15UH		JR8	1-216-295-91	METAL GLAZE 0 5% 1/10W	
L401	1-410-214-31	INDUCTOR CHIP 68UH		JR9	1-216-295-91	METAL GLAZE 0 5% 1/10W	
L1001	1-408-419-00	INDUCTOR 68UH		JR10	1-216-295-91	METAL GLAZE 0 5% 1/10W	
L1002	1-408-419-00	INDUCTOR 68UH		JR12	1-216-295-91	METAL GLAZE 0 5% 1/10W	
L1003	1-410-999-11	INDUCTOR CHIP 3.3UH		JR13	1-216-295-91	METAL GLAZE 0 5% 1/10W	
L1101	1-412-004-31	INDUCTOR CHIP 6.8UH		JR14	1-216-295-91	METAL GLAZE 0 5% 1/10W	
				JR15	1-216-295-91	METAL GLAZE 0 5% 1/10W	
				JR16	1-216-295-91	METAL GLAZE 0 5% 1/10W	
				JR17	1-216-295-91	METAL GLAZE 0 5% 1/10W	
				JR18	1-216-295-91	METAL GLAZE 0 5% 1/10W	
				JR19	1-216-295-91	METAL GLAZE 0 5% 1/10W	
				JR22	1-216-295-91	METAL GLAZE 0 5% 1/10W	
				JR24	1-216-295-91	METAL GLAZE 0 5% 1/10W	
				JR28	1-216-296-91	METAL GLAZE 0 5% 1/8W	

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REF.NO.	PART NO.	DESCRIPTION	REMARK
JR30	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR31	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR51	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR52	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR55	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR56	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR57	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR59	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR60	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR61	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR62	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR65	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR69	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR70	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR71	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR113	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR120	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR122	1-216-295-91	METAL GLAZE 0 5% 1/10W (KV-C2981A/C2981D/C2983E)	
JR123	1-216-295-91	METAL GLAZE 0 5% 1/10W (KV-C2981A/C2981D/C2983E)	
JR124	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR125	1-216-295-91	METAL GLAZE 0 5% 1/10W (KV-C2981A/C2981D/C2983E)	
JR126	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR201	1-216-295-91	METAL GLAZE 0 5% 1/10W (KV-C2981A/C2981D)	
JR202	1-216-295-91	METAL GLAZE 0 5% 1/10W (KV-C2981A/C2981D)	
JR401	1-216-295-91	METAL GLAZE 0 5% 1/10W (KV-C2980B)	
JR402	1-216-295-91	METAL GLAZE 0 5% 1/10W (KV-C2980B)	
JR403	1-216-295-91	METAL GLAZE 0 5% 1/10W (KV-C2980B)	
JR408	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR1004	1-216-295-91	METAL GLAZE 0 5% 1/10W	
R1	1-216-049-00	METAL GLAZE 1K 5% 1/10W (KV-C2980B)	
R6	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R16	1-216-049-00	METAL GLAZE 1K 5% 1/10W (KV-C2980B)	
R21	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R24	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R25	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R26	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R27	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R29	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R31	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R33	1-216-063-00	METAL GLAZE 3.9K 5% 1/10W	
R35	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R44	1-216-121-00	METAL GLAZE 1M 5% 1/10W	
R46	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R47	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R49	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R50	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R54	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R59	1-216-121-00	METAL GLAZE 1M 5% 1/10W	
R60	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R61	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R66	1-216-033-00	METAL GLAZE 220 5% 1/10W	

REF.NO.	PART NO.	DESCRIPTION	REMARK
R70	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R71	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R72	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R73	1-216-677-11	METAL CHIP 12K 0.50% 1/10W	
R75	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R76	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R77	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R78	1-216-037-00	METAL GLAZE 330 5% 1/10W	
R79	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R82	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R83	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R84	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R85	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R86	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R87	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R88	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R89	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R90	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R91	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R92	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R93	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R94	1-216-039-00	METAL GLAZE 390 5% 1/10W	
R95	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R96	1-216-071-00	METAL GLAZE 8.2K 5% 1/10W	
R97	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R99	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R101	1-216-675-11	METAL CHIP 10K 0.50% 1/10W	
R103	1-216-679-11	METAL CHIP 15K 0.50% 1/10W	
R104	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R105	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R106	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R107	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W	
R108	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W	
R109	1-216-180-00	METAL GLAZE 180 5% 1/8W	
R110	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R111	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R112	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R113	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R114	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R115	1-218-755-11	METAL CHIP 130K 0.50% 1/10W	
R116	1-216-113-00	METAL GLAZE 470K 5% 1/10W	
R117	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R118	1-216-107-00	METAL GLAZE 270K 5% 1/10W	
R119	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R120	1-216-035-00	METAL GLAZE 270 5% 1/10W	
R121	1-216-035-00	METAL GLAZE 270 5% 1/10W	
R122	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R123	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R124	1-216-039-00	METAL GLAZE 390 5% 1/10W	
R125	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R126	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R127	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R128	1-216-043-00	METAL GLAZE 560 5% 1/10W	
R130	1-216-043-00	METAL GLAZE 560 5% 1/10W	
R131	1-216-043-00	METAL GLAZE 560 5% 1/10W	
R134	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W (KV-C2980B/C2981D)	
R135	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W (KV-C2980B/C2981D)	
R136	1-216-081-00	METAL GLAZE 22K 5% 1/10W	

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R137	1-216-081-00	METAL GLAZE 22K 5%	1/10W	R211	1-216-025-00	METAL GLAZE 100 5%	1/10W
R139	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W	R213	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W
R140	1-216-089-91	METAL GLAZE 47K 5%	1/10W	R216	1-216-685-11	METAL CHIP 27K 0.50%	1/10W
R141	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W	R217	1-216-031-00	METAL GLAZE 180 5%	1/10W
R142	1-216-089-91	METAL GLAZE 47K 5%	1/10W	R219	1-216-025-00	METAL GLAZE 100 5%	1/10W
R143	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W (KV-C2980B/C2981D)	R221	1-216-025-00	METAL GLAZE 100 5%	1/10W
R144	1-216-059-00	METAL GLAZE 2.7K 5%	1/10W	R222	1-216-025-00	METAL GLAZE 100 5%	1/10W
R145	1-216-059-00	METAL GLAZE 2.7K 5%	1/10W	R223	1-216-029-00	METAL GLAZE 150 5%	1/10W
R146	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W	R224	1-216-025-00	METAL GLAZE 100 5%	1/10W
R147	1-216-033-00	METAL GLAZE 220 5%	1/10W (KV-C2981A/C2981D/C2983E)	R305	1-216-049-00	METAL GLAZE 1K 5%	1/10W
	1-216-031-00	METAL GLAZE 180 5%	1/10W (KV-C2980B)	R308	1-216-025-00	METAL GLAZE 100 5%	1/10W
R148	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W	R309	1-216-025-00	METAL GLAZE 100 5%	1/10W
R149	1-216-049-00	METAL GLAZE 1K 5%	1/10W	R311	1-216-025-00	METAL GLAZE 100 5%	1/10W
R150	1-216-295-91	METAL GLAZE 0 5%	1/10W (KV-C2980B)	R313	1-216-025-00	METAL GLAZE 100 5%	1/10W
R151	1-216-081-00	METAL GLAZE 22K 5%	1/10W	R315	1-216-025-00	METAL GLAZE 100 5%	1/10W
R153	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W	R316	1-216-025-00	METAL GLAZE 100 5%	1/10W
R154	1-216-069-00	METAL GLAZE 6.8K 5%	1/10W	R317	1-216-025-00	METAL GLAZE 100 5%	1/10W
R155	1-216-089-91	METAL GLAZE 47K 5%	1/10W	R318	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R156	1-216-073-00	METAL GLAZE 10K 5%	1/10W	R319	1-216-025-00	METAL GLAZE 100 5%	1/10W
R157	1-216-295-91	METAL GLAZE 0 5%	1/10W	R320	1-216-025-00	METAL GLAZE 100 5%	1/10W
R160	1-216-049-00	METAL GLAZE 1K 5%	1/10W	R321	1-216-025-00	METAL GLAZE 100 5%	1/10W
R161	1-216-031-00	METAL GLAZE 180 5%	1/10W	R322	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W
R162	1-216-017-00	METAL GLAZE 47 5%	1/10W	R323	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R163	1-216-049-00	METAL GLAZE 1K 5%	1/10W	R325	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R164	1-216-025-00	METAL GLAZE 100 5%	1/10W	R326	1-216-077-00	METAL GLAZE 15K 5%	1/10W
R165	1-216-089-91	METAL GLAZE 47K 5%	1/10W	R327	1-216-097-00	METAL GLAZE 100K 5%	1/10W
R166	1-216-097-00	METAL GLAZE 100K 5%	1/10W	R328	1-216-025-00	METAL GLAZE 100 5%	1/10W
R170	1-216-073-00	METAL GLAZE 10K 5%	1/10W	R329	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W
R171	1-216-035-00	METAL GLAZE 270 5%	1/10W	R330	1-216-033-00	METAL GLAZE 220 5%	1/10W
R172	1-216-295-91	METAL GLAZE 0 5%	1/10W	R331	1-216-033-00	METAL GLAZE 220 5%	1/10W
R173	1-216-035-00	METAL GLAZE 270 5%	1/10W	R332	1-216-033-00	METAL GLAZE 220 5%	1/10W
R174	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W	R333	1-216-689-11	METAL CHIP 39K 0.50%	1/10W
R180	1-216-049-00	METAL GLAZE 1K 5%	1/10W	R340	1-216-097-00	METAL GLAZE 100K 5%	1/10W
R182	1-216-073-00	METAL GLAZE 10K 5%	1/10W	R341	1-216-083-00	METAL GLAZE 27K 5%	1/10W
R183	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W	R342	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R185	1-216-071-00	METAL GLAZE 8.2K 5%	1/10W	R352	1-216-123-11	METAL GLAZE 1.2M 5%	1/10W
R186	1-216-059-00	METAL GLAZE 2.7K 5%	1/10W	R354	1-216-025-00	METAL GLAZE 100 5%	1/10W
R193	1-216-049-00	METAL GLAZE 1K 5%	1/10W (KV-C2980B)	R355	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
R194	1-216-180-00	METAL GLAZE 180 5%	1/8W	R356	1-216-025-00	METAL GLAZE 100 5%	1/10W
R195	1-216-113-00	METAL GLAZE 470K 5%	1/10W	R364	1-216-041-00	METAL GLAZE 470 5%	1/10W
R196	1-216-017-00	METAL GLAZE 47 5%	1/10W	R365	1-216-027-00	METAL GLAZE 120 5%	1/10W
R197	1-216-041-00	METAL GLAZE 470 5%	1/10W	R368	1-216-069-00	METAL GLAZE 6.8K 5%	1/10W (KV-C2981A/C2981D/C2983E)
R198	1-216-029-00	METAL GLAZE 150 5%	1/10W	R370	1-216-033-00	METAL GLAZE 220 5%	1/10W
R199	1-216-039-00	METAL GLAZE 390 5%	1/10W (KV-C2981A/C2981D/C2983E)	R371	1-216-033-00	METAL GLAZE 220 5%	1/10W
	1-216-051-00	METAL GLAZE 1.2K 5%	1/10W (KV-C2980B)	R372	1-216-033-00	METAL GLAZE 220 5%	1/10W
R200	1-216-047-00	METAL GLAZE 820 5%	1/10W	R373	1-216-041-00	METAL GLAZE 470 5%	1/10W
R201	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W	R380	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R202	1-216-091-00	METAL GLAZE 56K 5%	1/10W	R381	1-216-025-00	METAL GLAZE 100 5%	1/10W
R203	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W	R382	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W
R204	1-216-025-00	METAL GLAZE 100 5%	1/10W	R383	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R205	1-216-025-00	METAL GLAZE 100 5%	1/10W	R384	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W
R206	1-216-049-00	METAL GLAZE 1K 5%	1/10W	R385	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R207	1-216-049-00	METAL GLAZE 1K 5%	1/10W	R386	1-216-041-00	METAL GLAZE 470 5%	1/10W
R210	1-216-025-00	METAL GLAZE 100 5%	1/10W	R387	1-216-041-00	METAL GLAZE 470 5%	1/10W
				R388	1-216-041-00	METAL GLAZE 470 5%	1/10W
				R389	1-216-041-00	METAL GLAZE 470 5%	1/10W
				R390	1-216-089-91	METAL GLAZE 47K 5%	1/10W
				R392	1-216-091-00	METAL GLAZE 56K 5%	1/10W
				R393	1-216-089-91	METAL GLAZE 47K 5%	1/10W

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REF.NO.	PART NO.	DESCRIPTION	REMARK
R401	1-216-039-00	METAL GLAZE 390 5%	1/10W
R402	1-216-089-91	METAL GLAZE 47K 5%	1/10W
R403	1-216-039-00	METAL GLAZE 390 5%	1/10W
R404	1-216-089-91	METAL GLAZE 47K 5%	1/10W
R405	1-216-039-00	METAL GLAZE 390 5%	1/10W
R406	1-216-039-00	METAL GLAZE 390 5%	1/10W
R407	1-216-198-91	METAL GLAZE 1K 5%	1/8W
R408	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W
R409	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W
R410	1-216-025-00	METAL GLAZE 100 5%	1/10W
R413	1-216-033-00	METAL GLAZE 220 5%	1/10W
R415	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W
R417	1-216-033-00	METAL GLAZE 220 5%	1/10W
R419	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W
R420	1-216-033-00	METAL GLAZE 220 5%	1/10W
R421	1-216-113-00	METAL GLAZE 470K 5%	1/10W
R422	1-216-022-00	METAL GLAZE 75 5%	1/10W
R423	1-216-093-00	METAL GLAZE 68K 5%	1/10W
R424	1-216-113-00	METAL GLAZE 470K 5%	1/10W
R425	1-216-022-00	METAL GLAZE 75 5%	1/10W
R426	1-216-025-00	METAL GLAZE 100 5%	1/10W
R427	1-216-188-00	METAL GLAZE 390 5%	1/8W
R429	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W
R430	1-216-089-91	METAL GLAZE 47K 5%	1/10W
R431	1-216-188-00	METAL GLAZE 390 5%	1/8W
R432	1-216-039-00	METAL GLAZE 390 5%	1/10W
R433	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W
R434	1-216-025-00	METAL GLAZE 100 5%	1/10W
R435	1-216-039-00	METAL GLAZE 390 5%	1/10W
R436	1-216-022-00	METAL GLAZE 75 5%	1/10W
R437	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R438	1-216-089-91	METAL GLAZE 47K 5%	1/10W
R439	1-216-071-00	METAL GLAZE 8.2K 5%	1/10W
R440	1-216-025-00	METAL GLAZE 100 5%	1/10W
R441	1-216-022-00	METAL GLAZE 75 5%	1/10W
R442	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W
R443	1-216-113-00	METAL GLAZE 470K 5%	1/10W
R444	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W
R445	1-216-113-00	METAL GLAZE 470K 5%	1/10W
R446	1-216-025-00	METAL GLAZE 100 5%	1/10W
R447	1-216-025-00	METAL GLAZE 100 5%	1/10W
R448	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R449	1-216-071-00	METAL GLAZE 8.2K 5%	1/10W
R454	1-216-089-91	METAL GLAZE 47K 5%	1/10W
R458	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R461	1-216-022-00	METAL GLAZE 75 5%	1/10W
R464	1-216-034-00	METAL GLAZE 240 5%	1/10W
R465	1-216-025-00	METAL GLAZE 100 5%	1/10W
R473	1-216-022-00	METAL GLAZE 75 5%	1/10W
R474	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R482	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R483	1-216-029-00	METAL GLAZE 150 5%	1/10W
R484	1-216-025-00	METAL GLAZE 100 5%	1/10W
R485	1-216-025-00	METAL GLAZE 100 5%	1/10W
R486	1-216-025-00	METAL GLAZE 100 5%	1/10W
R487	1-216-022-00	METAL GLAZE 75 5%	1/10W
R488	1-216-022-00	METAL GLAZE 75 5%	1/10W
R489	1-216-022-00	METAL GLAZE 75 5%	1/10W
R490	1-216-295-91	METAL GLAZE 0 5%	1/10W
R491	1-216-295-91	METAL GLAZE 0 5%	1/10W

REF.NO.	PART NO.	DESCRIPTION	REMARK
R492	1-216-295-91	METAL GLAZE 0 5%	1/10W
	< R1001 - R1029 FITTED ON > < KV-C2981A/C2981D/C2983E >		
R1001	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R1002	1-216-025-00	METAL GLAZE 100 5%	1/10W
R1004	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R1005	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R1008	1-216-085-00	METAL GLAZE 33K 5%	1/10W
R1009	1-216-025-00	METAL GLAZE 100 5%	1/10W
R1010	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W
R1011	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W
R1012	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W
R1014	1-216-025-00	METAL GLAZE 100 5%	1/10W
R1015	1-216-025-00	METAL GLAZE 100 5%	1/10W
R1016	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R1025	1-216-033-00	METAL GLAZE 220 5%	1/10W
R1026	1-216-033-00	METAL GLAZE 220 5%	1/10W
R1027	1-216-033-00	METAL GLAZE 220 5%	1/10W
R1029	1-216-025-00	METAL GLAZE 100 5%	1/10W
	< R1101 - R1118 FITTED ON > < KV-C2980B/C2983E >		
R1101	1-216-025-00	METAL GLAZE 100 5%	1/10W
R1102	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R1103	1-220-149-11	METAL GLAZE 2.2 10%	1/2W
R1104	1-216-097-00	METAL GLAZE 100K 5%	1/10W
R1105	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
R1106	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R1107	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R1108	1-216-121-00	METAL GLAZE 1M 5%	1/10W
R1109	1-216-121-00	METAL GLAZE 1M 5%	1/10W
R1110	1-220-238-11	METAL GLAZE 10 5%	1/4W
R1111	1-216-025-00	METAL GLAZE 100 5%	1/10W
R1112	1-216-025-00	METAL GLAZE 100 5%	1/10W
R1113	1-216-117-00	METAL GLAZE 680K 5%	1/10W
R1114	1-216-158-00	METAL GLAZE 22 5%	1/8W
R1115	1-216-121-00	METAL GLAZE 1M 5%	1/10W
R1116	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R1117	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R1118	1-220-149-11	METAL GLAZE 2.2 10%	1/2W
	< RESISTOR NETWORK >		
RA1	1-236-908-11	RESISTOR, NETWORK (CHIP TYPE)	
RA2	1-236-908-11	RESISTOR, NETWORK (CHIP TYPE)	
RA3	1-236-908-11	RESISTOR, NETWORK (CHIP TYPE)	
RA7	1-236-908-11	RESISTOR, NETWORK (CHIP TYPE)	
RA8	1-239-412-11	NETWORK, RESISTOR (CHIP TYPE)	
RA9	1-239-412-11	NETWORK, RESISTOR (CHIP TYPE)	
RA10	1-236-908-11	RESISTOR, NETWORK (CHIP TYPE)	
RA11	1-236-904-11	RESISTOR, NETWORK (CHIP TYPE)	
	< VARIABLE RESISTOR >		
RV102	1-241-765-11	RES, ADJ CARBON 22K (KV-C2980B)	
	< TUNER >		
TU101	8-598-045-01	TUNER (BTP-EC411)	

The components identified by shading and marked : are critical for safety.
Replace only with the part number specified.

A

C

D

REF.NO.	PART NO.	DESCRIPTION	REMARK
< CRYSTAL >			
X2	1-579-063-21	VIBRATOR, CERAMIC	
X301	1-760-331-11	VIBRATOR, CRYSTAL	
X1001	1-567-495-11	OSCILLATOR, CRYSTAL (KV-C2981A/C2981D/C2983E)	
X1101	1-579-689-21	VIBRATOR, CRYSTAL (KV-C2980B/C2983E)	

*A-1638-053-A C BOARD, COMPLETE			

< CAPACITOR >			
C702	1-102-824-00	CERAMIC 470PF 5% 50V	
C703	1-102-115-00	CERAMIC 560PF 10% 50V	
C704	1-102-116-00	CERAMIC 680PF 10% 50V	
C706	1-102-113-00	CERAMIC 390PF 10% 50V	
C706	1-102-822-00	CERAMIC 390PF 5% 50V	
C707	1-162-116-00	CERAMIC 680PF 10% 2KV	
C708	1-162-114-00	CERAMIC 0.0047MF 2KV	
C709	1-102-114-00	CERAMIC 470PF 10% 50V	
C710	1-123-947-00	ELECT 10MF 20% 250V	
C712	1-102-115-00	CERAMIC 560PF 10% 50V	
C714	1-124-360-00	ELECT 1000MF 20% 16V	
C717	1-102-114-00	CERAMIC 470PF 10% 50V	
C718	1-102-114-00	CERAMIC 470PF 10% 50V	
C719	1-102-114-00	CERAMIC 470PF 10% 50V	
< CONNECTOR >			
CN702	1-695-915-11	TAB (CONTACT)	
CN703	*1-568-882-51	PIN, CONNECTOR 7P	
< DIODE >			
D701	8-719-110-14	DIODE RD9.1ESB3	
D702	8-719-901-33	DIODE 1SS133	
D703	8-719-901-33	DIODE 1SS133	
D704	8-719-901-33	DIODE 1SS133	
D705	8-719-901-33	DIODE 1SS133	
D706	8-719-901-33	DIODE 1SS133	
D707	8-719-901-33	DIODE 1SS133	
D708	8-719-901-33	DIODE 1SS133	
D709	8-719-901-33	DIODE 1SS133	
D710	8-719-901-33	DIODE 1SS133	
D711	8-719-302-43	DIODE EL1Z	
D713	8-719-901-33	DIODE 1SS133	
< CRT SOCKET >			
J701	A 1-526-990-21	SOCKET, CRT	
< COIL >			
L704	1-408-609-41	INDUCTOR 33UH	
< TRANSISTOR >			
Q702	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q703	8-729-906-70	TRANSISTOR BF871	
Q704	8-729-200-17	TRANSISTOR 2SA1091-O	
Q705	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q706	8-729-906-70	TRANSISTOR BF871	
Q707	8-729-200-17	TRANSISTOR 2SA1091-O	

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q708	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q709	8-729-906-70	TRANSISTOR BF871	
Q710	8-729-200-17	TRANSISTOR 2SA1091-O	
< RESISTOR >			
R704	1-216-486-00	METAL OXIDE 8.2K 5% 3W F	
R705	1-202-822-00	SOLID 2.2K 10% 1/2W	
R706	1-249-409-11	CARBON 220 5% 1/4W	
R707	1-249-408-11	CARBON 180 5% 1/4W	
R709	1-202-844-00	SOLID 330K 10% 1/2W	
R711	1-249-421-11	CARBON 2.2K 5% 1/4W	
R712	1-202-822-00	SOLID 2.2K 10% 1/2W	
R713	1-215-493-00	METAL 1M 1% 1/4W	
R714	1-216-486-00	METAL OXIDE 8.2K 5% 3W F	
R715	1-249-417-11	CARBON 1K 5% 1/4W	
R716	1-249-409-11	CARBON 220 5% 1/4W	
R717	1-249-408-11	CARBON 180 5% 1/4W	
R718	1-202-814-11	SOLID 33K 10% 1/2W	
R720	1-249-421-11	CARBON 2.2K 5% 1/4W	
R722	1-202-848-00	SOLID 680K 10% 1/2W	
R723	1-249-417-11	CARBON 1K 5% 1/4W	
R724	1-202-846-00	SOLID 470K 10% 1/2W	
R726	1-202-822-00	SOLID 2.2K 10% 1/2W	
R727	1-249-409-11	CARBON 220 5% 1/4W	
R728	1-216-350-21	METAL OXIDE 1.2 5% 1W F	
R729	1-249-408-11	CARBON 180 5% 1/4W	
R731	1-249-421-11	CARBON 2.2K 5% 1/4W	
R732	1-215-479-00	METAL 270K 1% 1/4W	
R734	1-247-807-31	CARBON 100 5% 1/4W	
R736	1-216-486-00	METAL OXIDE 8.2K 5% 3W F	
R737	1-215-485-00	METAL 470K 1% 1/4W	
R739	1-249-417-11	CARBON 1K 5% 1/4W	
R741	1-202-549-00	SOLID 100 20% 1/2W	
R743	1-202-842-11	SOLID 220K 10% 1/2W	
< VARIABLE RESISTOR >			
RV701	1-230-641-11	RES, ADJ, METAL GLAZE 2.2M	
RV702	1-241-656-11	RES, ADJ, METAL FILM 110M	

*A-1642-125-A COMPLETE PCB, D			

4-201-023-01 SPACER, INSULATING			
4-202-373-01 SPRING, IC			
4-812-134-00 RIVET NYLON, 3.5			
< CAPACITOR >			
C502	1-102-824-00	CERAMIC 470PF 5% 50V	
C503	1-136-165-00	FILM 0.1MF 5% 50V	
C504	1-102-824-00	CERAMIC 470PF 5% 50V	
C506	1-124-480-11	ELECT 470MF 20% 25V	
C507	1-124-767-00	ELECT 2.2MF 20% 50V	
C509	1-136-165-00	FILM 0.1MF 5% 50V	
C510	1-124-911-11	ELECT 220MF 20% 50V	
C511	1-136-202-11	FILM 0.33MF 5% 63V	
C513	1-106-220-00	MYLAR 0.1MF 10% 100V	
C514	1-136-165-00	FILM 0.1MF 5% 50V	
C515	1-124-480-11	ELECT 470MF 20% 25V	
C517	1-124-480-11	ELECT 470MF 20% 25V	
C518	1-102-228-00	CERAMIC 470PF 10% 500V	

The components identified by shading and marked Δ are critical for safety.
Replace only with the part number specified.

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C519	1-102-228-00	CERAMIC	470PF 10% 500V	C821	1-162-114-00	CERAMIC	0.0047MF 2KV
C520	1-124-480-11	ELECT	470MF 20% 25V	C822	1-123-948-00	ELECT	22MF 20% 250V
C521	1-124-006-11	ELECT	10MF 20% 25V	C824	1-123-024-21	ELECT	33MF 160V
C522	1-124-907-11	ELECT	10MF 20% 50V	C829	1-124-902-00	ELECT	0.47MF 20% 50V
C523	1-136-165-00	FILM	0.1MF 5% 50V	C830	1-124-902-00	ELECT	0.47MF 20% 50V
C600	Δ 1-164-503-61	CERAMIC	0.0022MF 20% 400V	C832	1-124-903-11	ELECT	1MF 20% 50V
C601	Δ 1-161-964-91	CERAMIC	0.0047MF 250V	C834	1-126-233-11	ELECT	22MF 20% 25V
C602	Δ 1-161-964-91	CERAMIC	0.0047MF 250V	C835	1-162-318-11	CERAMIC	0.001MF 10% 500V
C603	1-125-318-00	ELECT(BLOCK)	220MF 20% 400V	C836	1-162-117-00	CERAMIC	100PF 10% 500V
C604	1-124-122-11	ELECT	100MF 20% 50V	C838	1-102-228-00	CERAMIC	470PF 10% 500V
C605	1-124-667-11	ELECT	10MF 20% 100V	C839	1-161-744-00	CERAMIC	0.01MF 250V
C606	1-162-318-11	CERAMIC	0.001MF 10% 500V	C906	1-124-910-11	ELECT	47MF 20% 50V
C607	1-124-120-11	ELECT	220MF 20% 25V	C908	1-124-910-11	ELECT	47MF 20% 50V
C608	1-109-880-11	FILM	0.0015MF 3% 2KV	C909	1-124-903-11	ELECT	1MF 20% 50V
C611	1-102-228-00	CERAMIC	470PF 10% 500V	C910	1-137-393-91	FILM	0.01MF 5% 100V
C612	1-104-799-11	ELECT	22MF 20% 100V	C1200	1-136-165-00	FILM	0.1MF 5% 50V
C613	1-124-347-00	ELECT	100MF 20% 160V	C1201	1-136-165-00	FILM	0.1MF 5% 50V
C614	1-126-804-11	ELECT	100MF 20% 25V	C1202	1-136-165-00	FILM	0.1MF 5% 50V
C615	1-126-376-11	ELECT	470MF 20% 25V	C1203	1-136-169-00	FILM	0.22MF 5% 50V
C616	1-128-386-11	ELECT	1000MF 20% 25V	C1204	1-136-169-00	FILM	0.22MF 5% 50V
C617	1-126-183-11	ELECT	1000MF 20% 16V	C1205	1-101-005-00	CERAMIC	0.022MF 50V
C618	1-136-165-00	FILM	0.1MF 5% 50V	C1206	1-101-005-00	CERAMIC	0.022MF 50V
C619	1-102-228-00	CERAMIC	470PF 10% 500V	C1207	1-126-101-11	ELECT	100MF 20% 16V
C620	1-102-228-00	CERAMIC	470PF 10% 500V	C1208	1-124-927-11	ELECT	4.7MF 20% 50V
C621	1-136-165-00	FILM	0.1MF 5% 50V	C1209	1-124-927-11	ELECT	4.7MF 20% 50V
C622	1-104-797-11	ELECT	0.47MF 20% 100V	C1210	1-124-925-11	ELECT	2.2MF 20% 50V
C623	1-124-120-11	ELECT	220MF 20% 25V	C1211	1-124-925-11	ELECT	2.2MF 20% 50V
C624	1-136-165-00	FILM	0.1MF 5% 50V	C1214	1-126-101-11	ELECT	100MF 20% 16V
C625	1-124-910-11	ELECT	47MF 20% 50V	C1215	1-136-173-00	FILM	0.47MF 5% 50V
C626	1-124-120-11	ELECT	220MF 20% 25V	C1216	1-137-366-11	FILM	0.0022MF 5% 50V
C627	1-124-120-11	ELECT	220MF 20% 25V	C1217	1-137-366-11	FILM	0.0022MF 5% 50V
C628	1-124-907-11	ELECT	10MF 20% 50V	C1218	1-124-120-11	ELECT	220MF 20% 16V
C629	1-126-800-51	ELECT	2200MF 20% 25V	< CONNECTOR >			
C630	1-126-800-51	ELECT	2200MF 20% 25V	CN600	Δ 1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P	
C631	1-124-916-11	ELECT	22MF 20% 50V	CN601	Δ 1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P	
C632	1-124-120-11	ELECT	220MF 20% 25V	CN602	Δ *1-695-292-11	PIN, CONNECTOR (POWER)	
C633	Δ 1-107-564-11	FILM	0.22MF 20% 300V	CN800	*1-580-798-11	CONNECTOR PIN (DY) 6P	
C634	Δ 1-107-564-11	FILM	0.22MF 20% 300V	CN803	1-695-915-11	TAB (CONTACT)	
C635	Δ 1-107-564-11	FILM	0.22MF 20% 300V	CN804	1-508-768-00	PIN, CONNECTOR (5MM PITCH) 6P	
C636	Δ 1-164-503-61	CERAMIC	0.0022MF 20% 400V	CN807	1-568-878-51	PIN, CONNECTOR 3P	
C639	1-136-165-00	FILM	0.1MF 5% 50V	CN901	*1-564-520-11	PLUG, CONNECTOR 5P	
C640	1-106-220-00	MYLAR	0.1MF 10% 100V	CN902	1-695-299-11	CONNECTOR, BOARD TO BOARD 50P	
C647	1-162-116-00	CERAMIC	680PF 10% 2KV	CN903	*1-564-516-11	PLUG, CONNECTOR 13P	
C800	1-137-437-11	FILM	0.0056MF 5% 50V	CN904	*1-564-509-11	PLUG, CONNECTOR 6P	
C801	1-136-153-00	FILM	0.01MF 5% 50V	CN904	*1-568-881-51	PIN, CONNECTOR 6P	
C804	1-136-165-00	FILM	0.1MF 5% 50V	CN905	*1-564-506-11	PLUG, CONNECTOR 3P	
C805	1-106-395-00	MYLAR	0.15MF 10% 200V	CN905	*1-568-878-51	PIN, CONNECTOR 3P	
C806	1-108-704-11	MYLAR	0.1MF 10% 200V	CN1200	*1-568-879-11	PIN, CONNECTOR 4P	
C807	1-136-540-11	FILM	0.82MF 5% 200V	CN1201	*1-568-878-51	PIN, CONNECTOR 3P	
C810	1-124-634-11	ELECT	1MF 20% 250V	< DIODE >			
C811	1-102-212-00	CERAMIC	820PF 10% 500V	D500	8-719-109-85	DIODE RD5.1ESB2	
C812	1-136-112-00	FILM	1.4MF 5% 200V	D502	8-719-979-85	DIODE EGP20G	
C813	1-129-722-00	FILM	0.047MF 10% 630V	D503	8-719-979-85	DIODE EGP20G	
C814	1-136-591-11	FILM	0.017MF 3% 1.4KV	D504	8-719-901-33	DIODE 1SS133	
C815	1-136-562-11	MYLAR	0.0082MF 10% 400V	D505	8-719-982-03	DIODE MTZJ-3.6A	
C816	1-161-754-00	CERAMIC	0.001MF 10% 2KV	D506	8-719-901-33	DIODE 1SS133	
C817	1-161-754-00	CERAMIC	0.001MF 10% 2KV	D507	8-719-109-85	DIODE RD5.1ESB2	
C818	1-162-116-00	CERAMIC	680PF 10% 2KV	D600	8-719-510-53	DIODE D4SB60L	
C819	1-136-208-11	FILM	0.068MF 10% 250V				
C820	1-102-114-00	CERAMIC	470PF 10% 50V				

The components identified by shading and marked * are critical for safety.
Replace only with the part number specified.

D

REF.NO.	PART NO.	DESCRIPTION	REMARK
D601	8-719-046-77	DIODE EM1-V1	
D603	8-719-109-97	DIODE RD6.8ESE2	
D604	8-719-046-75	DIODE EU-1-V1	
D605	8-719-312-61	DIODE EU-1Z	
D606	8-719-312-61	DIODE EU-1Z	
D607	8-719-046-78	DIODE EG-1Z-V1	
D608	8-719-046-75	DIODE EU-1-V1	
D609	8-719-301-64	DIODE RU4DS	
D610	8-719-046-74	DIODE AU-01Z-V1	
D611	8-719-302-43	DIODE EL1Z	
D612	8-719-046-76	DIODE RU-3YX-V1	
D613	8-719-302-43	DIODE EL1Z	
D614	8-719-045-48	DIODE FML-G12S	
D615	8-719-046-75	DIODE EU-1-V1	
D616	8-719-110-03	DIODE RD7.5ESB2	
D617	8-719-901-33	DIODE 1SS133	
D618	8-719-901-33	DIODE 1SS133	
D619	8-719-901-33	DIODE 1SS133	
D620	8-719-901-33	DIODE 1SS133	
D622	8-719-921-69	DIODE MTZJ-9.1	
D625	8-719-901-33	DIODE 1SS133	
D626	8-719-046-74	DIODE AU-01Z-V1	
D800	8-719-901-33	DIODE 1SS133	
D801	8-719-901-33	DIODE 1SS133	
D802	8-719-901-33	DIODE 1SS133	
D803	8-719-908-03	DIODE GP08D	
D807	8-719-302-43	DIODE EL1Z	
D808	8-719-908-03	DIODE GP08D	
D809	8-719-018-82	DIODE RGP02-20EL-6494	
D810	8-719-302-43	DIODE EL1Z	
D812	8-719-038-49	DIODE FMS-3FU-LF027-103	
D815	8-719-908-03	DIODE GP08D	
D817	8-719-109-89	DIODE RD5.6ESB2	
D902	8-719-921-69	DIODE MTZJ-9.1	
D903	8-719-921-69	DIODE MTZJ-9.1	
D904	8-719-921-69	DIODE MTZJ-9.1	
D905	8-719-921-69	DIODE MTZJ-9.1	
D906	8-719-921-69	DIODE MTZJ-9.1	
D1201	8-719-109-72	DIODE RD-3.9ESB2	
< FERRITE BEAD >			
FB600	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB601	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB602	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB604	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
FB605	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
FB606	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB607	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
< IC >			
IC500	8-759-192-71	IC STV9379	
IC600	8-759-183-88	IC STR-S6708	
IC601	8-749-924-92	IC TLP6212GB	
IC602	8-749-923-26	IC SE135N-F12	
IC603	8-759-171-05	IC UPC7805H	
IC604	8-759-250-63	IC TL750L05CLPR	
IC605	8-759-701-79	IC NJM7812FA	
IC606	8-759-267-25	IC LM2940T-90	
IC800	8-759-103-93	IC UPC393C	
IC1200	8-759-250-68	IC TDA7264	

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC1201	8-759-502-21	IC TDA2822M	
< COIL >			
JW150	1-408-113-00	INDUCTOR 4.7UH	
L502	1-412-519-11	INDUCTOR 3.3UH	
L503	1-412-519-11	INDUCTOR 3.3UH	
L609	1-412-533-21	INDUCTOR 47UH	
L611	1-412-527-11	INDUCTOR 15UH	
L612	1-414-415-11	INDUCTOR, WIDE BAND	
L613	1-414-415-11	INDUCTOR, WIDE BAND	
L800	1-459-087-00	COIL, HCC DUST CORE 3.9MMH	
L801	1-459-111-00	COIL, DRAM CORE (CDI)	
L802	1-459-104-00	COIL, WITH CORE	
L803	1-420-872-00	COIL, AIR CORE	
L804	1-409-771-11	COIL, HORIZONTAL LINEARITY	
L805	1-406-675-11	COIL, CHOKE 4.7MMH	
L809	1-412-533-21	INDUCTOR 47UH	
< IC LINK >			
PS600	1-532-686-21	LINK, IC 2.7A (ICP-N50)	
PS601	1-532-686-21	LINK, IC 2.7A (ICP-N50)	
PS602	1-532-686-21	LINK, IC 2.7A (ICP-N50)	
PS603	1-532-686-21	LINK, IC 2.7A (ICP-N50)	
PS801	1-532-605-91	LINK, IC 0.4A (ICP-N10)	
< TRANSISTOR >			
Q501	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q502	8-729-173-38	TRANSISTOR 2SA733-K	
Q503	8-729-900-89	TRANSISTOR DTC144ES	
Q601	8-729-025-05	TRANSISTOR 2SC3852A-0	
Q602	8-729-320-28	TRANSISTOR 2SA1667	
Q603	8-729-024-35	TRANSISTOR 2SC2808STP-R	
Q604	8-729-024-35	TRANSISTOR 2SC2808STP-R	
Q605	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q606	8-729-900-65	TRANSISTOR DTA144ES	
Q607	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q800	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q801	8-729-017-06	TRANSISTOR 2SC4793	
Q802	8-729-016-32	TRANSISTOR 2SC4927-01	
Q803	8-729-119-80	TRANSISTOR 2SC2688-LK	
Q805	8-729-900-89	TRANSISTOR DTC144ES	
Q1200	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1201	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1202	8-729-900-80	TRANSISTOR DTC114ES	
Q1203	8-729-900-74	TRANSISTOR DTC143TS	
Q1204	8-729-900-74	TRANSISTOR DTC143TS	
< RESISTOR >			
R500	1-215-457-00	METAL 33K 1% 1/4W	
R502	1-249-421-11	CARBON 2.2K 5% 1/4W	
R503	1-249-429-11	CARBON 10K 5% 1/4W	
R504	1-215-459-00	METAL 39K 1% 1/4W	
R505	1-249-382-11	CARBON 1.2 5% 1/4W	F
R506	1-215-447-00	METAL 12K 1% 1/4W	
R507	1-215-888-00	METAL OXIDE 220 5% 2W	F
R508	1-216-371-00	METAL OXIDE 1.5 5% 2W	F
R509	1-249-443-11	CARBON 0.47 5% 1/4W	F
R510	1-249-443-11	CARBON 0.47 5% 1/4W	F

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Replace only with the part number specified.

D

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R517	1-215-427-00	METAL	1.8K 1% 1/4W	R805	1-249-425-11	CARBON	4.7K 5% 1/4W
R518	1-215-427-00	METAL	1.8K 1% 1/4W	R812	1-249-421-11	CARBON	2.2K 5% 1/4W
R520	1-215-457-00	METAL	33K 1% 1/4W	R813	1-215-867-00	METAL OXIDE	470 5% 1W F
R521	1-215-461-00	METAL	47K 1% 1/4W	R814	1-249-411-11	CARBON	330 5% 1/4W
R522	1-249-433-11	CARBON	22K 5% 1/4W	R816	1-216-481-11	METAL OXIDE	1.2K 5% 3W F
R523	1-249-433-11	CARBON	22K 5% 1/4W	R817	1-216-481-11	METAL OXIDE	1.2K 5% 3W F
R524	1-249-425-11	CARBON	4.7K 5% 1/4W	R818	1-215-882-00	METAL OXIDE	22 5% 2W F
R525	1-249-425-11	CARBON	4.7K 5% 1/4W	R819	1-216-345-11	METAL OXIDE	0.47 5% 1W F
R526	1-249-421-11	CARBON	2.2K 5% 1/4W	R820	1-249-403-11	CARBON	68 5% 1/4W
R528	1-259-880-11	CARBON	2.2M 5% 1/4W	R821	1-215-909-11	METAL OXIDE	47 5% 3W F
R529	1-247-895-00	CARBON	470K 5% 1/4W	R822	1-215-868-00	METAL OXIDE	680 5% 1W F
R600	1-216-490-11	METAL OXIDE	39K 5% 3W F	R824	1-249-420-11	CARBON	1.8K 5% 1/4W
R601	1-249-417-11	CARBON	1K 5% 1/4W	R826	1-247-752-11	CARBON	1K 5% 1/2W
R603	1-215-875-11	METAL OXIDE	10K 5% 1W F	R827	1-249-425-11	CARBON	4.7K 5% 1/4W
R604	1-249-420-11	CARBON	1.8K 5% 1/4W	R828	1-249-430-11	CARBON	12K 5% 1/4W
R605	1-216-362-11	METAL OXIDE	0.27 5% 2W F	R829	1-249-493-11	CARBON	56K 5% 1/2W
R607	1-216-421-71	METAL OXIDE	12 5% 1W F	R830	1-217-778-11	FUSIBLE	1K 5% 1W F
R608	1-216-365-00	METAL OXIDE	0.47 5% 2W F	R833	1-249-421-11	CARBON	2.2K 5% 1/4W F
R610	1-215-427-00	METAL	1.8K 1% 1/4W	R836	1-249-439-11	CARBON	68K 5% 1/4W
R611	1-215-859-00	METAL OXIDE	22 5% 1W F	R837	1-249-431-11	CARBON	15K 5% 1/4W
R612	1-249-428-11	CARBON	8.2K 5% 1/4W	R840	1-247-807-31	CARBON	100 5% 1/4W
R613	1-249-417-11	CARBON	1K 5% 1/4W	R841	1-249-418-11	CARBON	1.2K 5% 1/4W
R614	1-215-877-11	METAL OXIDE	22K 5% 1W F	R842	1-249-441-11	CARBON	100K 5% 1/4W
R615	1-249-435-11	CARBON	33K 5% 1/4W	R843	1-247-893-11	CARBON	390K 5% 1/4W
R616	1-215-479-00	METAL	270K 1% 1/4W	R846	1-249-441-11	CARBON	100K 5% 1/4W
R617	1-215-901-00	METAL OXIDE	33K 5% 2W F	R847	1-247-891-00	CARBON	330K 5% 1/4W
R618	1-249-433-11	CARBON	22K 5% 1/4W	R848	1-247-887-00	CARBON	220K 5% 1/4W
R619	1-216-425-11	METAL OXIDE	56 5% 1W F	R849	1-249-429-11	CARBON	10K 5% 1/4W
R620	1-247-895-00	CARBON	470K 5% 1/4W	R850	1-249-425-11	CARBON	4.7K 5% 1/4W
R621	1-216-425-11	METAL OXIDE	56 5% 1W F	R851	1-215-898-11	METAL OXIDE	10K 5% 2W F
R622	1-249-437-11	CARBON	47K 5% 1/4W	R852	1-249-432-11	CARBON	18K 5% 1/4W
R623	1-249-429-11	CARBON	10K 5% 1/4W	R901	1-202-539-00	SOLID	39 10% 1/2W
R624	1-249-405-11	CARBON	100 5% 1/4W F	R902	1-202-539-00	SOLID	39 10% 1/2W
R625	1-249-434-11	CARBON	27K 5% 1/4W	R907	1-247-804-11	CARBON	75 5% 1/4W
R626	1-249-430-11	CARBON	12K 5% 1/4W	R916	1-249-397-11	CARBON	22 5% 1/4W
R628	1-249-415-11	CARBON	680 5% 1/4W F	R917	1-249-397-11	CARBON	22 5% 1/4W
R629	1-244-945-91	CARBON	1M 5% 1/2W	R1200	1-249-425-11	CARBON	4.7K 5% 1/4W
R630	1-218-265-11	METAL	8.2M 5% 1W	R1201	1-249-434-11	CARBON	27K 5% 1/4W
R631	1-205-949-11	WIREWOUND	1.8 5% 10W	R1202	1-249-393-11	CARBON	10 5% 1/4W F
R632	1-247-807-31	CARBON	100 5% 1/4W	R1203	1-249-421-11	CARBON	2.2K 5% 1/4W
R633	1-247-807-31	CARBON	100 5% 1/4W	R1204	1-249-421-11	CARBON	2.2K 5% 1/4W
R634	1-249-397-11	CARBON	22 5% 1/4W F	R1205	1-249-428-11	CARBON	8.2K 5% 1/4W
R635	1-249-437-11	CARBON	47K 5% 1/4W	R1206	1-249-428-11	CARBON	8.2K 5% 1/4W
R636	1-249-417-11	CARBON	1K 5% 1/4W	R1207	1-249-417-11	CARBON	1K 5% 1/4W
R637	1-249-409-11	CARBON	220 5% 1/4W	R1208	1-212-849-00	FUSIBLE	4.7 5% 1/4W F
R638	1-249-433-11	CARBON	22K 5% 1/4W	R1209	1-212-849-00	FUSIBLE	4.7 5% 1/4W F
R639	1-215-427-00	METAL	1.8K 1% 1/4W	R1210	1-249-417-11	CARBON	1K 5% 1/4W
R640	1-216-381-11	METAL OXIDE	0.22 5% 3W F	R1211	1-249-424-11	CARBON	3.9K 5% 1/4W
R641	1-216-381-11	METAL OXIDE	0.22 5% 3W F	R1212	1-249-424-11	CARBON	3.9K 5% 1/4W
R642	1-205-949-11	WIREWOUND	1.8 5% 10W	R1213	1-249-421-11	CARBON	2.2K 5% 1/4W
R644	1-247-807-31	CARBON	100 5% 1/4W	R1216	1-249-413-11	CARBON	470 5% 1/4W
R645	1-249-422-11	CARBON	2.7K 5% 1/4W	R1217	1-249-425-11	CARBON	4.7K 5% 1/4W
R646	1-249-377-11	CARBON	0.47 5% 1/4W F	< VARIABLE RESISTOR >			
R647	1-202-933-61	FUSIBLE	0.1 10% 1/2W F	RV301	1-238-552-11	RES, ADJ, CARBON 470K	
R648	1-216-397-11	METAL OXIDE	4.7 5% 3W F	< RELAY >			
R800	1-249-421-11	CARBON	2.2K 5% 1/4W	RY600	1-515-720-31	RELAY	
R801	1-249-429-11	CARBON	10K 5% 1/4W				
R802	1-249-431-11	CARBON	15K 5% 1/4W				
R803	1-249-423-11	CARBON	3.3K 5% 1/4W				
R804	1-249-430-11	CARBON	12K 5% 1/4W				

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D

VM

H1

REF.NO.	PART NO.	DESCRIPTION	REMARK
< SPARK GAP >			
SG801	1-519-422-11	GAP, SPARK	
< TRANSFORMER >			
LF600	1-421-776-11	LFT	
LF601	1-421-776-11	LFT	
T601	1-426-805-11	TRANSFORMER	
T800	1-424-545-11	TRANSFORMER, FERRITE (PMT)	
T803	1-453-169-11	TRANSFORMER ASSY, FLYBACK (UX-1604A2)	
T804	1-437-090-00	HDT	
< THERMISTOR >			
THP600	1-809-827-11	THERMISTOR, POSITIVE	

*A-1644-052-A VM BOARD, COMPLETE			

*4-368-683-21 SPRING, TRANSISTOR			
< CAPACITOR >			
C1701	1-124-119-00	ELECT 330MF	20% 16V
C1702	1-101-880-00	CERAMIC 47PF	5% 50V
C1703	1-102-115-00	CERAMIC 560PF	10% 50V
C1704	1-161-830-00	CERAMIC 0.0047MF	500V
C1705	1-124-120-11	ELECT 220MF	20% 16V
C1706	1-123-935-00	ELECT 33MF	20% 160V
C1707	1-124-907-11	ELECT 10MF	20% 50V
C1708	1-101-006-00	CERAMIC 0.047MF	50V
C1709	1-108-704-11	MYLAR 0.1MF	10% 200V
C1710	1-136-207-11	FILM 0.047MF	10% 250V
C1711	1-162-318-11	CERAMIC 0.001MF	10% 500V
C1712	1-124-799-11	ELECT 2.2MF	20% 160V
C1713	1-162-318-11	CERAMIC 0.001MF	10% 500V
C1714	1-136-207-11	FILM 0.047MF	10% 250V
C1716	1-124-907-11	ELECT 10MF	20% 50V
C1718	1-124-120-11	ELECT 220MF	20% 16V
C1719	1-124-927-11	ELECT 4.7MF	20% 50V
< CONNECTOR >			
CN1819	*1-568-882-51	PIN, CONNECTOR 7P	
< DIODE >			
D1701	8-719-901-33	DIODE 1SS133	
D1702	8-719-901-33	DIODE 1SS133	
D1703	8-719-901-33	DIODE 1SS133	
D1704	8-719-982-37	DIODE MTZJ-39C	
D1705	8-719-982-37	DIODE MTZJ-39C	
D1706	8-719-901-33	DIODE 1SS133	
D1707	8-719-901-33	DIODE 1SS133	
< COIL >			
L1701	1-408-417-00	INDUCTOR 47UH	
L1702	1-408-418-00	INDUCTOR 56UH	
< TRANSISTOR >			
Q1701	8-729-119-78	TRANSISTOR 2SC2785-HFE	

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q1702	8-729-173-38	TRANSISTOR 2SA733-K	
Q1703	8-729-017-05	TRANSISTOR 2SA1837	
Q1704	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1705	8-729-017-06	TRANSISTOR 2SC4793	
Q1706	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1707	8-729-140-96	TRANSISTOR 2SD774-34	
Q1708	8-729-901-59	TRANSISTOR BF199	
Q1709	8-729-255-12	TRANSISTOR 2SC2551-0	
< RESISTOR >			
R1701	1-247-807-31	CARBON 100 5%	1/4W
R1702	1-249-420-11	CARBON 1.8K 5%	1/4W
R1703	1-247-807-31	CARBON 100 5%	1/4W
R1704	1-249-420-11	CARBON 1.8K 5%	1/4W
R1705	1-247-736-11	CARBON 56 5%	1/2W F
R1706	1-249-414-11	CARBON 560 5%	1/4W F
R1707	1-249-412-11	CARBON 390 5%	1/4W
R1709	1-249-416-11	CARBON 820 5%	1/4W
R1710	1-249-385-11	CARBON 2.2 5%	1/4W F
R1711	1-249-432-11	CARBON 18K 5%	1/4W
R1712	1-249-435-11	CARBON 33K 5%	1/4W
R1713	1-249-438-11	CARBON 56K 5%	1/4W
R1714	1-249-429-11	CARBON 10K 5%	1/4W
R1715	1-216-476-11	METAL OXIDE 180 5%	3W F
R1716	1-249-417-11	CARBON 1K 5%	1/4W F
R1717	1-249-432-11	CARBON 18K 5%	1/4W
R1718	1-249-410-11	CARBON 270 5%	1/4W
R1719	1-249-419-11	CARBON 1.5K 5%	1/4W
R1720	1-249-441-11	CARBON 100K 5%	1/4W
R1721	1-249-414-11	CARBON 560 5%	1/4W
R1722	1-249-385-11	CARBON 2.2 5%	1/4W F
R1723	1-249-429-11	CARBON 10K 5%	1/4W
R1724	1-249-436-11	CARBON 39K 5%	1/4W
R1725	1-249-417-11	CARBON 1K 5%	1/4W
R1726	1-249-411-11	CARBON 330 5%	1/4W
R1727	1-249-402-11	CARBON 56 5%	1/4W F
R1729	1-216-451-11	METAL OXIDE 120 5%	2W F
R1731	1-249-420-11	CARBON 1.8K 5%	1/4W
R1732	1-249-426-11	CARBON 5.6K 5%	1/4W
R1734	1-249-419-11	CARBON 1.5K 5%	1/4W

*1-652-275-11 H1 BOARD			

< CAPACITOR >			
C900	1-101-810-00	CERAMIC 100PF	5% 50V
C901	1-101-810-00	CERAMIC 100PF	5% 50V
C902	1-137-372-11	FILM 0.022MF	5% 50V
C903	1-137-372-11	FILM 0.022MF	5% 50V
C907	1-124-903-11	ELECT 1MF	20% 50V
< CONNECTOR >			
CN900	1-568-678-21	TERMINAL BLOCK, S 3P	
CN906	*1-564-516-11	PLUG, CONNECTOR 13P	
< SOCKET >			
J900	1-764-606-11	JACK	

The components identified by shading and marked * are critical for safety.
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KV-C298

H1

H2

H3

REF.NO.	PART NO.	DESCRIPTION	REMARK
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< COIL >

L900	1-408-409-00	INDUCTOR	10UH
L901	1-408-409-00	INDUCTOR	10UH
L902	1-408-409-00	INDUCTOR	10UH
L903	1-408-409-00	INDUCTOR	10UH

< RESISTOR >

R905	1-247-804-11	CARBON	75 5% 1/4W
R906	1-247-804-11	CARBON	75 5% 1/4W
R909	1-249-437-11	CARBON	47K 5% 1/4W
R910	1-249-437-11	CARBON	47K 5% 1/4W
R915	1-249-397-11	CARBON	22 5% 1/4W

*1-652-269-11 H2 BOARD

< CAPACITOR >

C904	1-124-910-11	ELECT	47MF 20% 50V
C905	1-124-907-11	ELECT	10MF 20% 50V

< CONNECTOR >

CN907	*1-568-881-51	PIN, CONNECTOR 6P
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< DIODE >

D901	8-719-030-11	DIODE SLA-570KT3F
	4-202-707-01	HOLDER, LED (D901)

< IC >

IC900	8-741-790-11	IC SBX1790-11
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< RESISTOR >

R900	1-249-409-11	CARBON	220 5% 1/4W
R908	1-249-401-11	CARBON	47 5% 1/4W

*1-652-270-11 H3 BOARD

< CAPACITOR >

CN908	*1-564-506-11	PLUG, CONNECTOR 3P
CN908	*1-568-878-51	PIN, CONNECTOR 3P

< RESISTOR >

R911	1-249-423-11	CARBON	3.3K 5% 1/4W
R912	1-249-429-11	CARBON	10K 5% 1/4W
R913	1-249-423-11	CARBON	3.3K 5% 1/4W
R914	1-249-429-11	CARBON	10K 5% 1/4W

< SWITCH >

S900	1-692-979-11	SWITCH, TACTILE
S901	1-692-979-11	SWITCH, TACTILE
S902	1-692-979-11	SWITCH, TACTILE

REF.NO.	PART NO.	DESCRIPTION	REMARK
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MISCELLANEOUS

1-571-433-11	SWITCH, PUSH (AC POWER)
1-751-680-11	CORD, POWER (WITH NOISE FILTER) (KV-C2981A/C2981D)
1-590-460-11	CORD, POWER (WITH CONNECTOR) (KV-C2980B/C2983E)
1-453-169-11	TRANSFORMER ASSY, FLYBACK (UX-1604A2)
8-598-045-01	TUNER (BTP-EC411)
8-451-313-61	DEFLECTION YOKE (Y29FXA)
1-402-747-21	COIL, DEGAUSSING
1-504-146-11	SPEAKER (5X11CM)

1-452-032-00 MAGNET, DISK; 10MM

1-452-094-00 MAGNET, ROTATABLE DISK; 15MM

1-452-509-41 NECK ASSY, CRT (NA308)

V901 8-733-831-05 PICTURE TUBE SD-191 (A68JY161X)

ACCESSORIES AND PACKING MATERIALS

4-202-767-41	MANUAL, INSTRUCTION (KV-C2981A)
4-202-767-51	MANUAL, INSTRUCTION (KV-C2980B)
4-202-767-91	MANUAL, INSTRUCTION (KV-C2981D)
4-202-767-71	MANUAL, INSTRUCTION (KV-C2983E)

*4-039-906-01 BAG, PROTECTION

*4-202-006-01 CUSHION (UPPER) (ASSY)

*4-202-009-01 CUSHION (LOWER) (ASSY)

*4-202-005-01 INDIVIDUAL CARTON

REMOTE COMMANDER

1-467-706-11 REMOTE COMMANDER (RM-833)
